

**OFFICE OF INSTRUCTIONAL ENHANCEMENT AND INTERNAL OPERATIONS**  
**Summary of State Board of Education Agenda Items**  
**February 14-15, 2013**

**OFFICE OF STUDENT ASSESSMENT**

09. Approval to begin the Administrative Procedures Act process: To adopt the *Common Core Essential Elements for English Language Arts* and *Common Core Essential Elements for Mathematics*

**Executive Summary**

The *Common Core Essential Elements for English Language Arts* and *Common Core Essential Elements for Mathematics* are specific statements of the content and skills that are linked to the Common Core State Standards grade level specific expectations for students with significant cognitive disabilities and provide a bridge to achieve grade differentiated expectations.

The *Common Core Essential Elements for English Language Arts* and *Common Core Essential Elements for Mathematics* are being adopted as part of Mississippi's participation in the Dynamic Learning Maps Consortium (DLM), which will replace the English Language Arts and Math sections of the Mississippi Alternate Assessment of Extended Curriculum Frameworks (MAAECF) for the 1% of students with significant cognitive disabilities for the 2014-2015 school year.

Recommendation: Approval

Back-up material attached

# Common Core Essential Elements for English Language Arts

From the State Members of the

Dynamic Learning Maps  
Alternate Assessment Consortium  
and  
Edvantia, Inc.

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# Common Core Essential Elements for English Language Arts

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\*For stakeholder demographics, See Appendix A.

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## INTRODUCTION

The Common Core Essential Elements (EEs) are linked to the Common Core State Standards (CCSS) for English Language Arts. A group of general educators, special educators, and content specialists from member states in the Dynamic Learning Maps (DLM) Consortium gathered to determine the essence of the CCSS. The stakeholder group members were selected by their states to participate in this work. State education agency (SEA) representatives and SEA-selected teachers collaborated to develop the EEs.

This document provides a high-level view of the relationship between the CCSS and the links to performance for students with significant cognitive disabilities. It is intended to provide a beginning structure for the design of a summative alternate assessment. The document is not intended as a stand-alone guide to instruction, nor is it intended to contain all the steps in a complete learning progression or detailed curriculum. The DLM and associated professional development will provide greater detail than described in this document.

Beginning with the English Language Arts CCSS, stakeholders defined links to illuminate the precursors for the essential content and skills contained in the grade level CCSS standards and indicators. These EEs are not intended as a redefinition of the standards. Rather, they are intended to describe challenging expectations for students with significant cognitive disabilities in relation to the CCSS. The EEs clarify the bridge between grade-level achievement expectations for students with significant cognitive disabilities who participate in alternate assessments and the CCSS.

Neither are the EEs intended to prescribe the beginning or end of instruction on the content and skills they represent; rather, they indicate the grade level at which initial mastery would be the target to be assessed. Students should begin instruction in content and skills at the earliest point possible and continue instruction until mastery is attained.

The stakeholder group also developed instructional achievement level descriptors (IALDs) for each of the EEs for four performance levels: I, II, III, and IV. For each IALD, the stakeholder group developed examples to illustrate how students might demonstrate achievement of the performance level across the broad range of students with significant cognitive disabilities. Both the IALDs and accompanying examples are available in a companion document available from the DLM Consortium.

Finally, the stakeholder group developed alternate assessment achievement descriptors for each grade level -- from third grade through high school -- where summative assessments might be required. The alternate assessment achievement descriptors will provide a bridge between the EEs and a summative alternate assessment aligned to them. The descriptors are intended to provide one element to guide development of the test blueprint, development of items and tasks that measure the full range of achievement, and the setting of cut scores during standard setting for the assessment. The focus of an alternate assessment in a standards-based system is based on the achievement that aligns with EEs linked to grade level content.

Together, the system of standards and descriptors is designed to allow students with significant cognitive disabilities to progress toward the achievement of state standards linked to grade level expectations. The relationship of standards and assessment to teaching and learning are depicted for use by teachers, assessment designers, and users of alternate assessment results.

## **NCLB GUIDANCE**

The stakeholder group's work was guided by the U. S. Department of Education's *Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001 [NCLB]*, which requires that alternate academic achievement standards align with the alternate assessment. They must

- include knowledge and skills that link to grade level expectations,
- promote access to the general curriculum, and
- reflect professional judgment of the highest learning standards possible for the group of students with the most significant cognitive disabilities.

Although the grade-level content may be reduced in complexity or modified to reflect prerequisite skills, the link to grade-level standards must be clear. The Peer Review Guidance notes that the concept of alternate achievement standards related to grade level may be ambiguous. According to the Guidance, the descriptors

- should be defined in a way that supports individual growth because of their linkage to different content across grades;
- are not likely to show the same clearly defined advances in cognitive complexity as the general education standards when examined across grade levels;
- should rely on the judgment of experienced special educators and administrators, higher education representatives, and parents of students with disabilities as they define alternate achievement standards; and
- should provide an appropriate challenge for students with the most significant cognitive disabilities as they move through their schooling.

The Guidance requires links to grade-level standards. The EEs were developed by DLM consortium states to differentiate knowledge and skills by grade level. This differentiation is intended to clarify the link between the grade-level EEs and the grade-level CCSS and to show a forward progression across grades. The progression of content and skills across years of instruction reflect the changing priorities for instruction and learning as students move from grade to grade. The differences from grade level to grade level are often subtle and progression is sometimes more horizontal than vertical. For example, the grade-to-grade level differences may consist of

added skills that are not of obvious increasing rigor compared to the differences found in the CCSS across grade levels. To the degree possible, skills escalate in complexity or rigor at Levels III and IV across the grades, with clear links to the shifting emphasis at each grade level in the CCSS.

## **ACCESS TO INSTRUCTION AND ASSESSMENT**

The EEs and Achievement Descriptors developed by the DLM consortium states are intended to create the maximum possible access to the CCSS for students with significant cognitive disabilities. The way in which information is presented for instruction and assessment and the manner in which students demonstrate achievement is in no way intended to be limited by statements of EEs or Achievement Descriptors. To that end, modes of communication, both for presentation or response, are not stated in either the EEs or Achievement Descriptors unless a specific mode is an expectation. Where no limitation has been stated, no limitation should be inferred. Students' opportunities to learn and to demonstrate learning should be maximized by providing whatever communication, assistive technologies, augmentative and alternative communication (AAC) devices, or other access tools that are necessary and routinely used by the student during instruction.

Students with significant cognitive disabilities include a broad range of students with diverse disabilities and communication needs. For some students with significant cognitive disabilities, graphic organizers similar to those used by students without disabilities provide useful access to content and are adequate to maximize opportunities to learn and demonstrate achievement. Other students require a range of assistive technologies to access content and demonstrate achievement. For some students, AAC devices and accommodations for hearing and visual impairments will be needed. As with other physical disabilities, students with visual impairments may perform some expectations using modified items, presentations, or response formats. A few items may not lend themselves to such modifications. Decisions about the appropriate modifications for visual impairments are accounted for in the design of the assessments.

The access challenge for some is compounded by the presence of multiple disabilities. All of these needs, as well as the impact of levels of alertness due to medication and other physical disabilities which may affect opportunities to respond appropriately, need to be considered.

Most presentation and response access conditions do not constitute accommodations as they are understood for students who take the general assessment. Methods of presentation that do not violate the intended construct by aiding or directing the students' response allow the student to perceive what knowledge or skill is expected. Aids to responding that do not constitute a violation of the intended construct allow the student to demonstrate the expected knowledge and skills. Examples of acceptable access technologies include the following:

- communication devices that compensate for a students' physical inability to produce independent speech.
- devices that compensate for a students' physical inability to manipulate objects or materials, point to responses, turn pages in a book, or use a pencil or keyboard to answer questions or produce writing.
- tools that maximize a students' ability to acquire knowledge and skills and to demonstrate the products of their learning.

## **ACCESSING THE GENERAL CURRICULUM**

Technology is also of particular importance to students with significant cognitive disabilities to access the general curriculum and achieve the EEs. Although educators have traditionally viewed technology as hardware and software, assistive technology tenets provide a broader view of the applications of low, medium, and high levels of technology use. Assistive technology tools can be vital to a student in acquiring and demonstrating learning unimpeded by the barriers that the disability presents.

Many students with significant cognitive disabilities have difficulty with or cannot use speech to communicate and/or are supported by the use of communication symbols (e.g., communication boards, speech generating devices, voice output communication devices) and supports to augment their speech and other means of communication. Students who require symbols and other AAC supports require frequent modeling in the use of those symbols to interact and respond during instruction. Students who use symbols and other communication supports need as much modeling as children who use speech to communicate. Modeling in this way is not viewed as a means of prompting, guidance, or support, just as having a teacher talk serves those purposes for a student who communicates using speech.

When modeling the use of symbols and other communication supports, teachers use the symbols and supports themselves, hand them to students without communication impairments to use, and involve the students who need to use them every day. Each of these steps can play an important role in validating the use of symbols and communication supports and demonstrating multiple levels of expertise in their use.

## READING AND WRITING

Evidence is mounting (Institute for Community Inclusion, 2010; TASH, 2011; & University of Washington, 2010) to support the belief that students with significant cognitive disabilities can learn to read more than sight words, as once thought. It is important that these students are taught to use all the tools for decoding words. However, their journey requires more time to achieve basic reading goals. For that reason, *shared reading* is referenced for students in kindergarten through grade five while foundational skills are being taught and beyond that grade for students achieving below the EE targets. The materials students learn to read at these levels are also at a significantly reduced level of complexity and depth in recognition of the challenges they face in acquiring reading skills. Their need to acquire reading skills remains a goal throughout their school careers.

Writing for these students is also a challenge, but an important goal to attain. Spelling words or writing complete sentences precisely is less important than developing basic writing skills. Many of these students face challenges in developing the required motor skills. While adaptive and alternate writing tools and other technologies are helpful, challenges remain. The technologies may help students overcome challenges in developing the required motor skills, but writing remains a cognitive challenge for these students. Composing sentences will require many years for students with significant cognitive disabilities to achieve. Still, early and continuing efforts are needed to maximize the achievement of these students in this important skill.

## GUIDANCE AND SUPPORT

The authors of the CCSS use the words, “prompting and support” at the earliest grade levels to indicate when students were not expected to achieve standards completely independently. Generally, “prompting” refers to “the action of saying something to persuade, encourage, or remind someone to do or say something” (McKean, 2005). However, in special education, prompting is often used to mean a system of structured cues to elicit desired behaviors that otherwise would not occur. In order to communicate clearly that teacher assistance is permitted during instruction of the EEs, and is not limited to structured prompting procedures, the decision was made by the stakeholder group to use the more general term *guidance* throughout the EEs.

Guidance and support during instruction should be interpreted as teacher encouragement, general assistance, and informative feedback to support the student in learning. Some examples of the kinds of teacher behaviors that would be considered guidance and support include

- getting the student started (e.g., “Tell me what to do first.”),
- providing a hint in the right direction without revealing the answer (e.g., Student wants to write dog but is unsure how, the teacher might say, “See if you can write the first letter in the word, /d/og.”),
- narrowing the field of choices as a student provides an inaccurate response,
- using structured technologies such as task specific word banks, or
- providing the structured cues such as those found in prompting procedures (e.g., least-to-most prompts, simultaneous prompting, and graduated guidance).

Guidance and support as described above apply to instruction. Alternate assessments measure the degree to which students with significant cognitive disabilities have mastered the EEs. During any assessment, accommodation(s) allowed on the assessment must have been used and practiced during instruction; however, some accommodations that are permissible during instruction would compromise the integrity of the assessments, thereby yielding invalid and unreliable results and cannot be used for assessment purposes. Some guidance and support strategies may not be allowed for assessment purposes when variance in teacher assistance, cues, and prompts could compromise judgments about mastery of the EEs and comparability of administration.

## **RELATIONSHIP TO THE DYNAMIC LEARNING MAPS ASSESSMENT**

The EEs and Achievement Descriptors developed by the DLM consortium states and their stakeholder representatives provide teachers with information about the level of knowledge and skills expected of their students

Assessment Achievement Level Descriptors (AALDs) will emerge as drafts. The AALDs are content and grade specific, but summarize across the EEs the key performance differences across levels of achievement and across grade levels. While draft AALDs will be used in the initial stages of standard setting to help guide that process, final AALDs will emerge from the standard setting process. Standard setting will take into account the overall degree of accuracy with which a student would need to perform in order to achieve at a particular level. Just as on a general education assessment, no individual student will be expected to perform proficiently on every EE in order to be considered Level III. . (See Levels of Performance described below.)

For purposes of the DLM assessments under development, the achievement descriptors provide a useful link between the EEs and the DLM assessments. The descriptors, along with DLM developed from the CCSS, provide guidance to the development of the alternate assessment so that a full range of performance is measured and the setting of score ranges within each level rests on a defined frame of reference. The grade level EEs and alternate achievement standards

- standardize meaning for the content and skill expectations,
- create consistency in expected performance,
- emphasize skill similarities for all students participating in the alternate assessments,

- accommodate diverse disabilities, and
- ground alternate assessments in a consistent set of expectations.

Achievement descriptors are used to categorize and explain student performance both in the course of instruction and on the alternate assessment.

## **SYSTEM ALIGNMENT**

The EEs are intended to contribute to a fully aligned system of standards, curriculum, teaching, learning, technology, and assessment that optimize equity of opportunity for all students in each classroom, school, and local education agency to access and learn the standards. To the degree possible, the grade level EEs are vertically aligned and linked to the grade level CCSS.

The linkages provided by the EEs to the CCSS are intended to increase access to the general curriculum for all students with disabilities. Just as the EEs are designed to define achievement in academic content areas linked to the CCSS, the EEs reframe the expectations for foundational skills in pre-academic and academic areas. Precursor/prerequisite and the unique enabling skills related to English language arts content is specified in the context of their roles as a foundation for students with significant cognitive disabilities to achieve skills related to academic content.

### **Levels of Performance**

Within this document, each grade level EE is cross-referenced to one or several CCSS.

Four performance levels have been proposed for the DLM's alternate academic achievement standards: I, II, III, and IV. Mastery is considered to be demonstrated at Level III and Level IV and is identified as meeting the Level III level on an alternate assessment as specified in the NCLB. A general description of each of these levels is included below:

**Level I** - A student at this level attempts to perform tasks with support.

**Level II** - A student at this level demonstrates some content knowledge and skills from the EEs linked to grade level standards.

**Level III** - A student at this level demonstrates content knowledge and skills at a level aligned with the complexity of the EEs.

**Level IV** - A student at this level demonstrates content knowledge and skills at a higher level of complexity than those described for Level III. Typically, this complexity includes the routine use of symbol systems as applied to English Language Arts.

For each performance level, specific descriptions of content and skills are bulleted and examples of each level of performance are provided. The EEs are intended as a resource for

developing individualized education plan (IEP) goals, benchmarks, and curricular materials in reading, language arts, and mathematics. Students may need goals and benchmarks in areas other than academic content domains (e.g., self-care/living skills, mobility). As always, IEPs address the individual needs of each student to make progress toward the standards.



## DOCUMENT ORGANIZATION

**Common Core Grade-Level Standards** are the Standard titles and Grade-Level Indicators as they appear in the CCSS for English Language Arts (Common Core State Standards Initiative, 2010).

**Common Core Essential Elements (EEs)** describe links to the CCSS for access by students with significant cognitive disabilities.

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.K.1.</b> With prompting and support, ask and answer questions about key details in a text.</p>	<p><b>EERL.K.1.</b> With guidance and support, identify details in familiar stories.</p>

### Directions for Interpreting Essential Elements

**Essential Elements (EEs).** The EEs are statements that provide links for students with significant cognitive disabilities to the essential content and skills defined in the grade-level clusters of the CCSS. The EEs provide a bridge for students with significant cognitive disabilities to the CCSS. The EEs are not intended as a reinterpretation of the CCSS; rather, they were developed to create a bridge between the CCSS and challenging achievement expectations for students with significant cognitive disabilities. The order in which the EEs are listed is a direct reflection of the order in which the CCSS are listed. The order is not intended to convey a sequence for instruction; rather, it illustrates progress across years. In the tables, the left column contains the CCSS grade-level standards and indicators and the middle column contains the EE linked to them. Each EE completes the phrase “Students will . . . .”

In keeping with the language of the English Language Arts CCSS document, the left hand column in this document will be titled CCSS Grade-Level Standards. This is worded differently in the Math CCSS and that is why the math document reads CCSS Grade-Level Clusters in the left-hand column.

“Begins in grade \_\_\_” is utilized when the expectations for students to begin to demonstrate mastery is found at a higher grade level. Planning for instruction should incorporate instruction related to the higher grade level EE and begin at the earliest possible point for each student. Students with significant cognitive disabilities may require several years of instruction prior to the point at which they may be expected to begin to demonstrate mastery of a concept.

## COMMON CORE ESSENTIAL ELEMENTS FOR KINDERGARTEN

### Kindergarten English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.K.1.</b> With prompting and support, ask and answer questions about key details in a text.</p>	<p><b>EERL.K.1.</b> With guidance and support, identify details in familiar stories.</p>
<p><b>RL.K.2.</b> With prompting and support, retell familiar stories, including key details.</p>	<p><b>EERL.K.2.</b> With guidance and support, identify major events in familiar stories.</p>
<p><b>RL.K.3.</b> With prompting and support, identify characters, settings, and major events in a story.</p>	<p><b>EERL.K.3.</b> With guidance and support, identify characters and settings in a familiar story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.K.4.</b> Ask and answer questions about unknown words in a text.</p>	<p><b>EERL.K.4.</b> With guidance and support, ask about an unknown word in a text.</p>
<p><b>RL.K.5.</b> Recognize common types of texts (e.g., storybooks, poems).</p>	<p><b>EERL.K.5.</b> With guidance and support, recognize familiar texts (e.g., storybooks, poems).</p>
<p><b>RL.K.6.</b> With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.</p>	<p><b>EERL.K.6.</b> With guidance and support, distinguish between words and illustrations in a story.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RL.K.7.</b> With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).</p>	<p><b>EERL.K.7.</b> With guidance and support, match illustrations with the story.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<b>RL.K.8.</b> (Not applicable to literature)	<b>EERL.K.8.</b> N/A
<b>RL.K.9.</b> With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	<b>EERL.K.9.</b> With guidance and support, identify the adventures or experiences of a character in a familiar story.
<b>Range of Reading and Level of Text Complexity.</b> <b>RL.K.10.</b> Actively engage in group reading activities with purpose and understanding.	<b>EERL.K.10.</b> **This Literature Essential Element references all elements above.

**Kindergarten English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.K.1.</b> With prompting and support, ask and answer questions about key details in a text.</p>	<p><b>EERI.K.1.</b> With guidance and support, identify a detail in a familiar text.</p>
<p><b>RI.K.2.</b> With prompting and support, identify the main topic and retell key details of a text.</p>	<p><b>EERI.K.2.</b> With guidance and support, identify the topic of a familiar text.</p>
<p><b>RI.K.3.</b> With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.</p>	<p><b>EERI.K.3.</b> With guidance and support, identify individuals, events, or ideas in a familiar informational text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.K.4.</b> With prompting and support, ask and answer questions about unknown words in a text.</p>	<p><b>EERI.K.4.</b> With guidance and support, ask about an unknown word in a text.</p>
<p><b>RI.K.5.</b> Identify the front cover, back cover, and title page of a book.</p>	<p><b>EERI.K.5.</b> With guidance and support, identify parts of a book.</p>
<p><b>RI.K.6.</b> Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.</p>	<p><b>EERI.K.6.</b> With guidance and support, distinguish between print and illustrations in an informational text.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.K.7.</b> With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).</p>	<p><b>EERI.K.7.</b> With guidance and supports, match illustrations to an informational text.</p>
<p><b>RI.K.8.</b> With prompting and support, identify the reasons an</p>	<p><b>EERI.K.8.</b> With guidance and support, identify points the author</p>

CCSS Grade-Level Standards	Common Core Essential Elements
author gives to support points in a text.	makes in an informational text.
<b>RI.K.9.</b> With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	<b>EERI.K.9.</b> With guidance and support, match similar parts of two texts on the same topic.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.K.10.</b> Actively engage in group reading activities with purpose and understanding.</p>	<b>EERI.K.10.</b> **This Literature Essential Element references all elements above.

**Kindergarten English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Print Concepts.</b></p> <p><b>RF.K.1.</b> Demonstrate understanding of the organization and basic features of print.</p> <p>a. Follow words from left to right, top to bottom, and page by page.</p>	<p><b>EERF.K.1.</b> With guidance and support, demonstrate an emerging understanding of the organization and basic features of print.</p> <p>a. With guidance and support during shared reading, turn pages one page at a time from beginning to end.</p>
<p>b. Recognize that spoken words are represented in written language by specific sequences of letters.</p>	<p><b>EERF.K.1.b.</b> N/A</p>
<p>c. Understand that words are separated by spaces in print.</p>	<p><b>EERF.K.1.c.</b> N/A</p>
<p>d. Recognize and name all upper- and lowercase letters of the alphabet.</p>	<p><b>EERF.K.1.d.</b> With guidance and support, recognize first letter of own name in print.</p>
<p><b>Phonological Awareness.</b></p> <p><b>RF.K.2.</b> Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. Recognize and produce rhyming words.</p>	<p><b>EERF.K.2.</b> With guidance and support, demonstrate an emerging understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. With guidance and support, recognize rhyming words.</p>
<p>b. Count, pronounce, blend, and segment syllables in spoken words.</p>	<p><b>EERF.K.2.b.</b> With guidance and support, recognize the number of words in a spoken message.</p>
<p>c. Blend and segment onsets and rimes [<i>sic</i>] of single-syllable spoken words.</p>	<p><b>EERF.K.2.c.</b> With guidance and support, identify single-syllable spoken words with the same onset (beginning sound) as a familiar word.</p>
<p>d. Isolate and pronounce the initial, medial vowel, and final</p>	<p><b>EERF.K.2.d.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. <sup>1</sup> (This does not include CVCs ending with /l/, /r/, or /x/.)	
e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	<b>EERF.K.2.e.</b> N/A
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.K.3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant.</p>	<p><b>EERF.K.3.</b> With guidance and support, apply letter name and letter-sound knowledge when decoding words during shared activities.</p> <p>a. With guidance and support, recognize sound of first letter in own name.</p>
b. Associate the long and short sounds with the common spellings (graphemes) for the five major vowels.	<b>EERF.K.3.b.</b> N/A
c. Read common high-frequency words by sight (e.g., <i>the, of, to, you, she, my, is, are, do, does</i> ).	<b>EERF.K.3.c.</b> With guidance and support, recognize common signs and/or symbols in the environment.
d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	<b>EERF.K.3.d.</b> N/A
<p><b>Fluency.</b></p> <p><b>RF.K.4.</b> Read emergent-reader texts with purpose and understanding.</p>	<b>EERF.K.4.</b> Engage in independent exploration of books.

<sup>1</sup> Words, syllables, or phonemes written in /slashes/refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

**Kindergarten English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.K.1.</b> Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., <i>My favorite book is . . .</i>).</p>	<p><b>EEW.K.1.</b> With guidance and support, select a topic or book and use drawing, dictating, or writing to state an opinion about it.</p>
<p><b>W.K.2.</b> Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.</p>	<p><b>EEW.K.2.</b> With guidance and support, select a topic and use drawing, dictating, or writing to share information about the topic.</p>
<p><b>W.K.3.</b> Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.</p>	<p><b>EEW.K.3.</b> With guidance and support, select an event and use drawing, dictating, or writing to narrate information about it.</p>
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.K.4.</b> (Begins in grade 3)</p>	<p><b>EEW.K.4.</b> (Begins in grade 3)</p>
<p><b>W.K.5.</b> With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.</p>	<p><b>EEW.K.5.</b> (Begins in grade 1)</p>
<p><b>W.K.6.</b> With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p><b>EEW.K.6.</b> With guidance and support from adults, explore a variety of digital tools to produce writing.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.K.7.</b> Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).</p>	<p><b>EEW.K.7.</b> With guidance and support, participate in shared research and writing projects.</p>
<p><b>W.K.8.</b> With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p>	<p><b>EEW.K.8.</b> With guidance and support from adults, identify information, objects, or events that relate to personal experiences.</p>
<p><b>W.K.9.</b> (Begins in grade 4)</p>	<p><b>EEW.K.9.</b> (Begins in grade 4)</p>
<p><b>Range of Writing.</b></p> <p><b>W.K.10.</b> (Begins in grade 3)</p>	<p><b>EEW.K.10.</b> (Begins in grade 3)</p>

### Kindergarten English Language Arts Standards: Speaking and Listening

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.K.1.</b> Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).</p>	<p><b>EESL.K.1.</b> Participate in communication exchanges with diverse partners.</p> <p>a. Communicate directly with peers.</p>
<p>b. Continue a conversation through multiple exchanges.</p>	<p><b>EESL.K.1.b.</b> Participate in multiple-turn communication exchanges with adults.</p>
<p><b>SL.K.2.</b> Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</p>	<p><b>EESL.K.2.</b> Demonstrate an emerging understanding of a familiar text read aloud or information presented orally or through other media by answering questions.</p>
<p><b>SL.K.3.</b> Ask and answer questions in order to seek help, get information, or clarify something that is not understood.</p>	<p><b>EESL.K.3.</b> Ask for help when needed.</p>
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.K.4.</b> Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.</p>	<p><b>EESL.K.4.</b> With guidance and support, identify familiar people, places, things, and events.</p>
<p><b>SL.K.5.</b> Add drawings or other visual displays to descriptions as desired to provide additional detail.</p>	<p><b>EESL.K.5.</b> With guidance and support, add or select drawings or other visual or tactual displays that relate to familiar people, places, things, and events.</p>
<p><b>SL.K.6.</b> Speak audibly and express thoughts, feelings, and ideas</p>	<p><b>EESL.K.6.</b> With guidance and support, communicate thoughts,</p>

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
clearly.	feelings, and ideas.

**Kindergarten English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.K.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Print many upper- and lowercase letters.</p>	<p><b>EEL.K.1.</b> Demonstrate emerging understandings of English grammar and word usage when communicating.</p> <p>a. With guidance and support, distinguish between letters and other symbols or shapes.</p>
<p>b. Use frequently occurring nouns and verbs.</p>	<p><b>EEL.K.1.b.</b> With guidance and support, identify objects or other symbols that represent familiar nouns.</p>
<p>c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>).</p>	<p><b>EEL.K.1.c.</b> N/A</p>
<p>d. Understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>).</p>	<p><b>EEL.K.1.d.</b> With guidance and support, answer simple questions (e.g., <i>who, what</i>).</p>
<p>e. Use the most frequently occurring prepositions (e.g., <i>to, from, in, out, on, off, for, of, by, with</i>).</p>	<p><b>EEL.K.1.e.</b> With guidance and support, demonstrate understanding of common prepositions: <i>on, off, in, out</i>.</p>
<p>f. Produce and expand complete sentences in shared language activities.</p>	<p><b>EEL.K.1.f.</b> With guidance and support, link two or more words together in communication.</p>
<p><b>L.K.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Capitalize the first word in a sentence and the pronoun <i>I</i>.</p> <p>b. Recognize and name end punctuation.</p> <p>c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).</p> <p>d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.</p>	<p><b>EEL.K.2.</b> Demonstrate emerging understandings of writing.</p> <p>a-d. Demonstrate emerging understandings of writing.</p>
<p><b>Knowledge of Language.</b></p>	<p><b>EEL.K.3.</b> (Begins in grade 2)</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<b>L.K.3.</b> (Begins in grade 2)	
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.K.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.</p> <p>a. Identify new meanings for familiar words and apply them accurately (e.g., knowing <i>duck</i> is a bird and learning the verb to <i>duck</i>).</p>	<p><b>EEL.K.4.</b> Demonstrate an understanding of vocabulary based on reading and other content.</p> <p>a. Demonstrate an understanding of familiar words.</p>
<p>b. Use the most frequently occurring inflections and affixes (e.g., <i>-ed</i>, <i>-s</i>, <i>re-</i>, <i>un-</i>, <i>pre-</i>, <i>-ful</i>, <i>-less</i>) as a clue to the meaning of an unknown word.</p>	<b>EEL.K.4.b.</b> N/A
<p><b>L.K.5.</b> With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <p>a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.</p>	<p><b>EEL.K.5.</b> With guidance and support from adults, explore word relationships:</p> <p>a. With guidance and support, sort common objects into familiar categories.</p>
<p>b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).</p>	<b>EEL.K.5.b.</b> With guidance and support, demonstrate understanding of frequently occurring opposites.
<p>c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).</p>	<b>EEL.K.5.c.</b> With guidance and support, use words to communicate in real-life situations.
<p>d. Distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk</i>, <i>march</i>, <i>strut</i>, <i>prance</i>) by acting out the meanings.</p>	<b>EEL.K.5.d.</b> With guidance and support, demonstrate an understanding of common verbs.
<b>L.K.6.</b> Use words and phrases acquired through conversations,	<b>EEL.K.6.</b> Use words acquired through conversations, being read

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
reading and being read to, and responding to texts.	to, and during shared reading activities.

## COMMON CORE ESSENTIAL ELEMENTS FOR FIRST GRADE

### First Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<b>Key Ideas and Details.</b>	
<b>RL.1.1.</b> Ask and answer questions about key details in a text.	<b>EERL.1.1.</b> Identify details in familiar stories.
<b>RL.1.2.</b> Retell stories, including key details, and demonstrate understanding of their central message or lesson.	<b>EERL.1.2.</b> Retell details from a familiar story.
<b>RL.1.3.</b> Describe characters, settings, and major events in a story, using key details.	<b>EERL.1.3.</b> Identify characters and settings in a familiar story.
<b>Craft and Structure.</b>	
<b>RL.1.4.</b> Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	<b>EERL.1.4.</b> Identify sensory or feeling words in a familiar story.
<b>RL.1.5.</b> Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	<b>EERL.1.5.</b> Classify reading materials into storybooks and informational books.
<b>RL.1.6.</b> Identify who is telling the story at various points in a text.	<b>EERL.1.6.</b> Identify a speaker in a familiar story.
<b>Integration of Knowledge and Ideas.</b>	
<b>RL.1.7.</b> Use illustrations and details in a story to describe its characters, setting, or events.	<b>EERL.1.7.</b> Identify details or illustrations that describe the characters or events in a familiar story.
<b>RL.1.8.</b> (Not applicable to literature)	<b>EERL.1.8.</b> N/A
<b>RL.1.9.</b> Compare and contrast the adventures and experiences of characters in stories.	<b>EERL.1.9.</b> Identify the adventures or experiences of characters in a familiar story.
<b>Range of Reading and Level of Text Complexity.</b>	<b>EERL.1.10.</b> **This Literature Essential Element references all

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
<b>RL.1.10.</b> With prompting and support, read prose and poetry of appropriate complexity for grade 1.	elements above.



**First Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.1.1.</b> Ask and answer questions about key details in a text.</p>	<p><b>EERI.1.1.</b> Identify details in familiar text.</p>
<p><b>RI.1.2.</b> Identify the main topic and retell key details of a text.</p>	<p><b>EERI.1.2.</b> Retell details of a familiar text.</p>
<p><b>RI.1.3.</b> Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p>	<p><b>EERI.1.3.</b> With guidance and support, identify events or ideas in a familiar text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.1.4.</b> Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p>	<p><b>EERI.1.4.</b> Respond to questions about a new word in familiar text.</p>
<p><b>RI.1.5.</b> Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</p>	<p><b>EERI.1.5.</b> With guidance and support, recognize that books have titles.</p>
<p><b>RI.1.6.</b> Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p>	<p><b>EERI.1.6.</b> With guidance and support, distinguish between text and illustrations in a text.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.1.7.</b> Use the illustrations and details in a text to describe its key ideas.</p>	<p><b>EERI.1.7.</b> Identify illustration that shows what the text is describing.</p>
<p><b>RI.1.8.</b> Identify the reasons an author gives to support points in a text.</p>	<p><b>EERI.1.8.</b> With guidance and support, identify details that match the topic of a text.</p>
<p><b>RI.1.9.</b> Identify basic similarities in and differences between two</p>	<p><b>EERI.1.9.</b> With guidance and support, match similar parts of two</p>

CCSS Grade-Level Standards	Common Core Essential Elements
texts on the same topic (e.g., in illustrations, descriptions, or procedures).	texts on the same topic.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.1.10.</b> With prompting and support read informational texts appropriately complex for grade 1.</p>	<p><b>EERI.1.10.</b> **This Literature Essential Element references all elements above.</p>

**First Grade English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Print Concepts.</b></p> <p><b>RF.1.1.</b> Demonstrate understanding of the organization and basic features of print.</p> <p>a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).</p>	<p><b>EERF.1.1.</b> Demonstrate an understanding of the organization and basic features of print.</p> <p>a. Interact with books one page at a time from beginning to end.</p>
	<p><b>EERF.1.1.b.</b> Follow print from left to right.</p> <p><b>EERF.1.1.c.</b> Follow print from top to bottom.</p>
<p><b>Phonological Awareness.</b></p> <p><b>RF.1.2.</b> Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. Distinguish long from short vowel sounds in spoken single-syllable words.</p>	<p><b>EERF.1.2.</b> Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. Identify spoken rhyming words</p>
<p>b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.</p>	<p><b>EERF.1.2.b.</b> With guidance and support, indicate the number of syllables in a spoken word.</p>
<p>c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.</p>	<p><b>EERF.1.2.c.</b> Identify a single syllable spoken word with the same onset (beginning sound) as a familiar word.</p>
<p>d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).</p>	<p><b>EERF.1.2.d.</b> Match orally presented segmented phonemes to pictures that are labeled orally first by an adult.</p>
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.1.3.</b> Know and apply grade-level phonics and word analysis</p>	<p><b>EERF.1.3.</b> Apply letter name and letter-sound knowledge when decoding words during shared activities.</p> <p>a. Identify words that begin with a single-consonant phoneme</p>

CCSS Grade-Level Standards	Common Core Essential Elements
skills in decoding words. a. Know the spelling-sound correspondences for common consonant.	that is spoken by an adult.
b. Decode regularly spelled one-syllable words.	<b>EERF.1.3.b.</b> N/A
c. Know final -e and common vowel team conventions for representing long vowel sounds.	<b>EERF.1.3.c.</b> N/A
d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.	<b>EERF.1.3.d.</b> N/A
e. Decode two-syllable words following basic patterns by breaking the words into syllables.	<b>EERF.1.3.e.</b> N/A
f. Read words with inflectional endings.	<b>EERF.1.3.f.</b> N/A
g. Recognize and read grade-appropriate irregularly	<b>EERF.1.3.g.</b> N/A
<b>Fluency.</b>  <b>RF.1.4.</b> Read with sufficient accuracy and fluency to support comprehension. a. Read grade-level text with purpose and understanding.	<b>EERF.1.4.</b> Engage in sustained independent study of books (e.g., studies a book one page at a time). a. Independently engage in exploring a book or navigating pages in a multimedia book.
b. Read grade-level text orally with accuracy, appropriate rate, and expression.	<b>EERF.1.4.b.</b> Sustain attention to a variety of reading materials reflecting a variety of text genre.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	<b>EERF.1.4.c.</b> N/A

**First Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.1.1.</b> Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.</p>	<p><b>EEW.1.1.</b> Select a book and use drawing, dictating, or writing to state an opinion about it.</p>
<p><b>W.1.2.</b> Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.</p>	<p><b>EEW.1.2.</b> Select a topic and use drawing, dictating, or writing to share information about it.</p>
<p><b>W.1.3.</b> Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.</p>	<p><b>EEW.1.3.</b> Select an event and use drawing, dictating, or writing to share information about it.</p>
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.1.4.</b> (Begins in grade 3)</p>	<p><b>EEW.1.4.</b> (Begins in grade 3)</p>
<p><b>W.1.5.</b> With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.</p>	<p><b>EEW.1.5.</b> With guidance and support from adults, add more information to own drawing, dictating, or writing to strengthen it.</p>
<p><b>W.1.6.</b> With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p><b>EEW.1.6</b> With guidance and support from adults, use a variety of digital tools to produce writing, including in collaboration with peers.</p>
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.1.7.</b> Participate in shared research and writing projects (e.g.,</p>	<p><b>EEW.1.7.</b> Participate in shared research and writing projects.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).	
<b>W.1.8.</b> With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	<b>EEW.1.8.</b> With guidance and support from adults, identify information related to personal experiences and answer simple questions about those experiences.
<b>W.1.9.</b> (Begins in grade 4)	<b>EEW.1.9.</b> (Begins in grade 4)
<b>Range of Writing.</b> <b>W.1.10.</b> (Begins in grade 3)	<b>EEW.1.10.</b> (Begins in grade 3)

**First Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.1.1.</b> Participate in collaborative conversations with diverse partners about <i>grade 1 topics and texts</i> with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p>	<p><b>EESL.1.1.</b> Participate in conversations with peers and adults.</p> <p>a. Engage in multiple-turn exchanges with peers.</p>
<p>b. Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.</p>	<p><b>EESL.1.1.b.</b> Build on comments or topics initiated by an adult.</p>
<p>c. Ask questions to clear up any confusion about the topics and texts under discussion.</p>	<p><b>EESL.1.1.c.</b> Uses one or two words to ask questions related to personally relevant topics.</p>
<p><b>SL.1.2.</b> Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p>	<p><b>EESL.1.2.</b> During shared reading activities, answer questions about details presented orally or through other media.</p>
<p><b>SL.1.3.</b> Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p>	<p><b>EESL.1.3.</b> Ask for help when needed.</p>
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.1.4.</b> Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.</p>	<p><b>EESL.1.4.</b> With guidance and support, identify familiar people, places, things, and events.</p>
<p><b>SL.1.5.</b> Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p>	<p><b>EESL.1.5.</b> Communicate own thoughts, feelings, or ideas.</p>
<p><b>SL.1.6.</b> Produce complete sentences when appropriate to task</p>	<p><b>EESL.1.6.</b> With guidance and support, provide more information</p>

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
and situation.	to clarify ideas, thoughts, and feelings.



**First Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.1.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Print all upper- and lowercase letters.</p>	<p><b>EEL.1.1.</b> Demonstrate emerging understandings of standard English usage when communicating.</p> <p>a. Write letters from own name.</p>
<p>b. Use common, proper, and possessive nouns.</p>	<p><b>EEL.1.1.b.</b> With guidance and support, use familiar nouns (e.g., own name, Mom, dog) in isolation.</p>
<p>c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).</p>	<p><b>EEL.1.1.c.</b> With guidance and support, produce noun + verb or verb + noun combinations.</p>
<p>d. Use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my; they, them, their, anyone, everything</i>).</p>	<p><b>EEL.1.1.d.</b> With guidance and support, use familiar personal pronouns (e.g., <i>I, me, and you</i>).</p>
<p>e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).</p>	<p><b>EEL.1.1.e.</b> With guidance and support, use familiar present tense verbs.</p>
<p>f. Use frequently occurring adjectives.</p>	<p><b>EEL.1.1.f.</b> With guidance and support, use familiar frequently occurring adjectives. (e.g., <i>big, hot</i>).</p>
<p>g. Use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>)</p>	<p><b>EEL.1.1.g.</b> N/A</p>
<p>h. Use determiners (e.g., articles, demonstratives).</p>	<p><b>EEL.1.1.h.</b> N/A</p>
<p>i. Use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>).</p>	<p><b>EEL.1.1.i.</b> With guidance and support, use frequently occurring prepositions: <i>in, out, on, off</i>.</p>
<p>j. Produce and expand complete simple and compound</p>	<p><b>EEL.1.1.j.</b> With guidance and support, use simple question words</p>

CCSS Grade-Level Standards	Common Core Essential Elements
declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	(interrogatives) (e.g., <i>who</i> , <i>what</i> ).
<b>L.1.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people.	<b>EEL.1.2.</b> Demonstrate emerging understandings of the use of conventions of standard English during communication. a. Locate first letter in own name when presented with name.
a. Use end punctuation for sentences.	<b>EEL.1.2.b.</b> N/A
b. Use commas in dates and to separate single words in a series.	<b>EEL.1.2.c.</b> N/A
c. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.	<b>EEL.1.2.d.</b> With guidance and support, recognize that letters are used to create words.
e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	<b>EEL.1.2.e.</b> N/A
<b>Knowledge of Language.</b>  <b>L.1.3.</b> (Begins in grade 2)	<b>EEL.1.3.</b> (Begins in grade 2)
<b>Vocabulary Acquisition and Use.</b>  <b>L.1.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 1 reading and content</i> , choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.	<b>EEL.1.4.a.</b> With guidance and support, demonstrate understanding of the meaning of newly acquired vocabulary.
b. Use frequently occurring affixes as a clue to the meaning of a word.	<b>EEL.1.4.b.</b> N/A
c. Identify frequently occurring root words (e.g., <i>look</i> ) and their inflectional forms (e.g., <i>looks</i> , <i>looked</i> , <i>looking</i> ).	<b>EEL.1.4.c.</b> N/A

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>L.1.5.</b> With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.</p> <p>a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.</p>	<p><b>EEL.1.5.</b> With guidance and support from adults, demonstrate emerging understandings of word relationships.</p> <p>a. With guidance and support from adults, sort common objects into familiar categories.</p>
<p>b. Define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes).</p>	<p><b>EEL.1.5.b.</b> With guidance and support from adults, identify attributes of familiar words.</p>
<p>c. Identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>).</p>	<p><b>EEL.1.5.c.</b> With guidance and support from adults, demonstrate understanding of words by identifying real-life connections between words and their use.</p>
<p>d. Distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings.</p>	<p><b>EEL.1.5.d.</b> N/A</p>
<p><b>L.1.6.</b> Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., <i>because</i>).</p>	<p><b>EEL.1.6.</b> N/A</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR SECOND GRADE

### Second Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.2.1.</b> Ask and answer such questions as <i>who</i>, <i>what</i>, <i>where</i>, <i>when</i>, <i>why</i>, and <i>how</i> to demonstrate understanding of key details in a text.</p>	<p><b>EERL.2.1.</b> Answer <i>who</i> and <i>where</i> questions to demonstrate understanding of details in a familiar text.</p>
<p><b>RL.2.2.</b> Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</p>	<p><b>EERL.2.2.</b> Retell familiar stories from diverse cultures, including two or more elements from different parts of the story.</p>
<p><b>RL.2.3.</b> Describe how characters in a story respond to major events and challenges.</p>	<p><b>EERL.2.3.</b> Identify the actions and feelings of the characters in a familiar story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.2.4.</b> Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.</p>	<p><b>EERL.2.4.</b> Identify rhyming words or repeated phrases in a familiar story, poem, or song.</p>
<p><b>RL.2.5.</b> Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.</p>	<p><b>EERL.2.5.</b> Determine the beginning and ending of a story.</p>
<p><b>RL.2.6.</b> Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.</p>	<p><b>EERL.2.6.</b> Identify the speakers in a dialogue.</p>
<p><b>Integration of Knowledge and Ideas.</b></p>	<p><b>EERL.2.7.</b> Use illustrations in print or digital text to identify</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RL.2.7.</b> Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p>	<p>characters and settings.</p>
<p><b>RL.2.8.</b> (Not applicable to literature)</p>	<p><b>EERL.2.8.</b> N/A</p>
<p><b>RL.2.9.</b> Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p>	<p><b>EERL.2.9.</b> Identify similarities in two versions of the same story.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.2.10.</b> By the end of the year read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>RL.2.10.</b> **This Literature Essential Element references all elements above.</p>

**Second Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.2.1.</b> Ask and answer such questions as <i>who</i>, <i>what</i>, <i>where</i>, <i>when</i>, <i>why</i>, and <i>how</i> to demonstrate understanding of key details in a text.</p>	<p><b>EERI.2.1.</b> Answer <i>who</i> and <i>what</i> questions to demonstrate understanding of details in a familiar text.</p>
<p><b>RI.2.2.</b> Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.</p>	<p><b>EERI.2.2.</b> Identify the topic of the text.</p>
<p><b>RI.2.3.</b> Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.</p>	<p><b>EERI.2.3.</b> Sequence at least two steps in a procedure or ideas/incidents in an event.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.2.4.</b> Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i>.</p>	<p><b>EERI.2.4.</b> Identify words related to a topic of a text.</p>
<p><b>RI.2.5.</b> Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.</p>	<p><b>EERI.2.5.</b> Locate facts or information in a familiar text.</p>
<p><b>RI.2.6.</b> Identify the main purpose of a text, including what the author wants to answer, explain, or describe.</p>	<p><b>EERI.2.6.</b> Identify purpose of a text.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.2.7.</b> Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.</p>	<p><b>EERI.2.7.</b> Demonstrate understanding of how images relate to a familiar informational text.</p>
<p><b>RI.2.8.</b> Describe how reasons support specific points the author</p>	<p><b>EERI.2.8.</b> N/A (See EERI.2.1.)</p>

CCSS Grade-Level Standards	Common Core Essential Elements
makes in a text.	
<b>RI.2.9.</b> Compare and contrast the most important points presented by two texts on the same topic.	<b>EERI.2.9.</b> Identify a common element between two texts.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.2.10.</b> By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<b>EERI.2.10.</b> **This Informational Text Essential Element references all elements above.

**Second Grade English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.2.3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <ul style="list-style-type: none"> <li>a. Distinguish long and short vowels when reading regularly spelled one-syllable words.</li> <li>b. Know spelling-sound correspondences for additional common vowel teams.</li> <li>c. Decode regularly spelled two-syllable words with long vowels.</li> </ul>	<p><b>EERF.2.3.a-c.</b> Apply letter-sound and word analysis skills in decoding words. In context, identify 18 or more letter-sound associations.</p>
<ul style="list-style-type: none"> <li>d. Decode words with common prefixes and suffixes.</li> <li>e. Identify words with inconsistent but common spelling-sound correspondences.</li> </ul>	<p><b>EERF.2.3.d-e.</b> Identify the beginning sound of familiar words beginning with a single consonant sound.</p>
<ul style="list-style-type: none"> <li>f. Recognize and read grade-appropriate irregularly spelled words.</li> </ul>	<p><b>EERF.2.3.f.</b> Recognize 10 or more written words.</p>
<p><b>Fluency.</b></p> <p><b>RF.2.4.</b> Read with sufficient accuracy and fluency to support comprehension.</p> <ul style="list-style-type: none"> <li>a. Read grade-level text with purpose and understanding.</li> <li>b. Read grade-level text orally with accuracy, appropriate rate, and expression.</li> <li>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</li> </ul>	<p><b>EERF.2.4.</b> Read a shared-reading selection.</p>



**Second Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.2.1.</b> Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., <i>because, and, also</i>) to connect opinion and reasons, and provide a concluding statement or section.</p>	<p><b>EEW.2.1.</b> Select a book and write, draw, or dictate to state an opinion about it and one reason to support the opinion.</p>
<p><b>W.2.2.</b> Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.</p>	<p><b>EEW.2.2.</b> Select a topic and use drawing, dictating, or writing to compose a message with one fact about the topic.</p>
<p><b>W.2.3.</b> Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.</p>	<p><b>EEW.2.3.</b> Select an event or personal experience and use drawing, writing, or dictating to compose a message about it.</p>
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.2.4.</b> (Begins in grade 3)</p>	<p><b>EEW.2.4.</b> (Begins in grade 3)</p>
<p><b>W.2.5.</b> With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.</p>	<p><b>EEW.2.5.</b> With guidance and support from adults and peers, add more information to own drawing, dictating, or writing to strengthen the message.</p>
<p><b>W.2.6.</b> With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p><b>EEW.2.6.</b> With guidance and support from adults and peers, use technology (including assistive technologies) to produce and publish writing.</p>
<p><b>Research to Build and Present Knowledge.</b></p>	<p><b>EEW.2.7.</b> Participate in shared writing projects - communicate a</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>W.2.7.</b> Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).</p>	<p>message to add information.</p>
<p><b>W.2.8.</b> Recall information from experiences or gather information from provided sources to answer a question.</p> <p><b>W.2.9.</b> (Begins in grade 4)</p>	<p><b>EEW.2.8.</b> Identify information related to personal experiences and answer simple questions about those experiences.</p> <p><b>EEW.2.9.</b> (Begins in grade 4)</p>
<p><b>Range of Writing.</b></p> <p><b>W.2.10.</b> (Begins in grade 3)</p>	<p><b>EEW.2.10.</b> (Begins in grade 3)</p>

**Second Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.2.1.</b> Participate in collaborative conversations with diverse partners about <i>grade 2 topics and texts</i> with peers and adults in small and larger groups.</p> <p>a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).</p>	<p><b>EESL.2.1.</b> Participate in conversations with peers and adults in small groups.</p> <p>a. Engage in multiple-turn exchanges with peers and adults in small groups.</p>
<p>b. Build on others’ talk in conversations by linking their comments to the remarks of others.</p>	<p><b>EERF.2.1.b.</b> Build on comments or topics initiated by adults and peers.</p>
<p>c. Ask for clarification and further explanation as needed about the topics and texts under discussion.</p>	<p><b>EESL.2.1.c.</b> Ask questions related to a prescribed topic or text.</p>
<p><b>SL.2.2.</b> Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.</p>	<p><b>EESL.2.2.</b> Ask and answer questions about key details from a text read aloud or information presented orally or through other media.</p>
<p><b>SL.2.3.</b> Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.</p>	<p><b>EESL.2.3.</b> Answer questions about what a speaker says.</p>
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.2.4.</b> Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p>	<p><b>EESL.2.4.</b> Identify a photograph or object that reflects a personal experience and tell one detail about it.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>SL.2.5.</b> Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.</p>	<p><b>EESL.2.5.</b> Select a visual, audio, or tactual representation to depict an experience, thoughts, or feelings.</p>
<p><b>SL.2.6.</b> Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.</p>	<p><b>EESL.2.6.</b> Communicate to provide clarification.</p>

**Second Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.2.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a-f. (See below)</p>	<p><b>EEL.2.1.</b> Communicate to convey information. a-f. Produce all letters.</p>
<p>a. Use collective nouns (e.g., <i>group</i>). b. Form and use frequently occurring irregular plural nouns (e.g., <i>feet, children, teeth, mice, fish</i>).</p>	<p><b>EEL.2.1.a-b.</b> Use frequently occurring nouns (e.g., <i>mom, dad, boy, girl</i>).</p>
<p>c. Use reflexive pronouns (e.g., <i>myself, ourselves</i>).</p>	<p><b>EEL.2.1.c.</b> Use frequently occurring pronouns to refer to self and others (e.g., <i>we, they, him, her, them</i>).</p>
<p>d. Form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat, hid, told</i>).</p>	<p><b>EEL.2.1.d.</b> Use frequently occurring verbs.</p>
<p>e. Use adjectives and adverbs, and choose between them depending on what is to be modified.</p>	<p><b>EEL.2.1.e.</b> Use frequently occurring adjectives.</p>
<p>f. Produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy</i>).</p>	<p><b>EEL.2.1.f.</b> Link two or more words together in communication.</p>
<p><b>L.2.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic names.</p>	<p><b>EEL.2.2.</b> Use conventions of spelling when communicating. a. Capitalize the first letter of familiar names.</p>
<p>b. Use commas in greetings and closings of letters.</p>	<p><b>EEL.2.2.b.</b> N/A</p>
<p>c. Use an apostrophe to form contractions and frequently</p>	<p><b>EEL.2.2.c.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
occurring possessives.	
d. Generalize learned spelling patterns when writing words (e.g., <i>cage</i> → <i>badge</i> ; <i>boy</i> → <i>boil</i> ).	<b>EEL.2.2.d.</b> Identify printed rhyming words with the same spelling pattern.
e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	<b>EEL.2.2.e.</b> Consult print in the environment to support reading and spelling.
<p><b>Knowledge of Language.</b></p> <p><b>L.2.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Compare formal and informal uses of English.</p>	<b>EEL.2.3.</b> Use informal language when communicating.
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.2.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies</p> <p>a. Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy</i>, <i>tell/retell</i>).</p>	<b>EEL.2.4.</b> Demonstrate knowledge of new vocabulary drawn from reading and content areas. <p>a-b. Use newly acquired vocabulary.</p>
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>addition</i> , <i>additional</i> ).	<b>EEL.2.4.c.</b> Sort words into familiar categories.
d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., <i>birdhouse</i> , <i>lighthouse</i> , <i>housefly</i> ; <i>bookshelf</i> , <i>notebook</i> , <i>bookmark</i> ).	<b>EEL.2.4.d.</b> N/A

CCSS Grade-Level Standards	Common Core Essential Elements
e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.	<b>EEL.2.4.e.</b> Ask about an unknown word.
<b>L.2.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., <i>describe foods that are spicy or juicy</i> ).	<b>EEL.2.5.</b> Demonstrate understanding of word relationships. a. Identify real-life connections between words and their use (e.g., <i>happy: "I am happy."</i> ).
b. Distinguish shades of meaning among closely related verbs (e.g., <i>toss, throw, hurl</i> ) and closely related adjectives (e.g., <i>thin, slender, skinny, scrawny</i> ).	<b>EEL.2.5.b.</b> Identify the function of common nouns.
<b>L.2.6.</b> Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., <i>When other kids are happy that makes me happy</i> ).	<b>EEL.2.6.</b> Use adjectives and adverbs from texts that have been read.

## COMMON CORE ESSENTIAL ELEMENTS FOR THIRD GRADE

### Third Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.3.1.</b> Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p>	<p><b>EERL.3.1.</b> Answer questions to demonstrate understanding of text.</p>
<p><b>RL.3.2.</b> Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.</p>	<p><b>EERL.3.2.</b> Retell stories, including fables, folktales, and myths from diverse cultures including details from the text.</p>
<p><b>RL.3.3.</b> Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.</p>	<p><b>EERL.3.3.</b> Identify the traits, motivations, or feelings of characters in a story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.3.4.</b> Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal language.</p>	<p><b>EERL.3.4.</b> Determine whether something described in the text could be true.</p>
<p><b>RL.3.5.</b> Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.</p>	<p><b>EERL.3.5.</b> Determine the beginning, middle, and end of a story.</p>
<p><b>RL.3.6.</b> Distinguish their own point of view from that of the narrator or those of the characters.</p>	<p><b>EERL.3.6.</b> Identify personal point of view about a character or the narrator.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RL.3.7.</b> Explain how specific aspects of a text’s illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).</p>	<p><b>EERL.3.7.</b> Identify parts of illustrations that depict a particular mood, setting, or character.</p>
<p><b>RL.3.8.</b> (Not applicable to literature)</p>	<p><b>EERL.3.8.</b> N/A</p>
<p><b>RL.3.9.</b> Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).</p>	<p><b>EERL.3.9.</b> Identify similarities in the settings of two stories by the same author.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.3.10.</b> By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.</p>	<p><b>EERL.3.10.</b> **This Literature Essential Element references all elements above.</p>

**Third Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.3.1.</b> Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p>	<p><b>EERI.3.1.</b> Answer questions related to a familiar text.</p>
<p><b>RI.3.2.</b> Determine the main idea of a text; recount the key details and explain how they support the main idea.</p>	<p><b>EERI.3.2.</b> Identify a detail of a text.</p>
<p><b>RI.3.3.</b> Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.</p>	<p><b>EERI.3.3.</b> List the progression of a series of events.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.3.4.</b> Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 3 topics or subject area</i>.</p>	<p><b>EERI.3.4.</b> Determine the meaning of vocabulary related to a familiar text.</p>
<p><b>RI.3.5.</b> Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.</p>	<p><b>EERI.3.5.</b> Identify text features and search tools.</p>
<p><b>RI.3.6.</b> Distinguish their own point of view from that of the author of a text.</p>	<p><b>EERI.3.6.</b> Identify a personal point of view about a text.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.3.7.</b> Use information gained from illustrations (e.g., maps,</p>	<p><b>EERI.3.7.</b> Demonstrate an understanding of text by connecting a visual element.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	
<b>RI.3.8.</b> Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	<b>EERI.3.8.</b> N/A (See EERI.3.3.)
<b>RI.3.9.</b> Compare and contrast the most important points and key details presented in two texts on the same topic.	<b>EERI.3.9.</b> Identify similarities of two resources on the same topic.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.3.10.</b> By the end of the year, read and comprehends informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.</p>	<b>EERI.3.10.</b> **This Informational Text Essential Element references all elements above.

**Third Grade English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.3.3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Identify and know the meaning of the most common prefixes and derivational suffixes.</p>	<p><b>EERF.3.3.</b> Apply letter-sound skills in decoding consonant sounds of familiar one-syllable words.</p> <p>a. In context, demonstrate basic knowledge of letter-sound correspondences.</p>
<p>b. Decode words with common Latin suffixes.</p>	<p><b>EERF.3.3.b.</b> With models and supports, decode single-syllable words with common spelling patterns (consonant-vowel-consonant [CVC] or high-frequency rhymes).</p>
<p>c. Decode multi-syllable words.</p>	<p><b>EERF.3.3.c.</b> N/A</p>
<p>d. Read grade-appropriate irregularly spelled words.</p>	<p><b>EERF.3.3.d.</b> Recognize 40 or more written words.</p>
<p><b>Fluency.</b></p> <p><b>RF.3.4.</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p>	<p><b>EERF.3.4.</b> Read text comprised of familiar words to support comprehension.</p> <p>a. Read familiar text with purpose and understanding.</p>
<p>b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.</p>	<p><b>EERF.3.4.b.</b> N/A</p>
<p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>	<p><b>EERF.3.4.c.</b> Use context to determine missing words in familiar texts.</p>

### Third Grade English Language Arts Standards: Writing<sup>2</sup>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.3.1.</b> Write opinion pieces on topics or texts, supporting a point of view with reasons.</p> <p>a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.</p> <p>b. Provide reasons that support the opinion.</p>	<p><b>EEW.3.1.a-b.</b> Select a text and write to state an opinion about it and one reason to support the opinion.</p>
<p>c. Use linking words and phrases (e.g., <i>because, therefore, since, for example</i>) to connect opinion and reasons.</p>	<p><b>EEW.3.1.c.</b> N/A</p>
<p>d. Provide a concluding statement or section.</p>	<p><b>EEW.3.1.d.</b> N/A</p>
<p><b>W.3.2.</b> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.</p> <p>b. Develop the topic with facts, definitions, and details.</p>	<p><b>EEW.3.2.a-b.</b> Select a topic and write about it including one fact or detail.</p>
<p>c. Use linking words and phrases (e.g., <i>also, another, and, more, but</i>) to connect ideas within categories of information.</p>	<p><b>EEW.3.2.c.</b> N/A</p>
<p>d. Provide a concluding statement or section.</p>	<p><b>EEW.3.2.d.</b> N/A</p>
<p><b>W.3.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear</p>	<p><b>EEW.3.3.a.</b> Select an event or personal experience and write one thing about it.</p>

<sup>2</sup> Throughout, writing can include standard writing instruments, computers, or alternate writing tools.

CCSS Grade-Level Standards	Common Core Essential Elements
event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.	
b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.	<b>EEW.3.3.b.</b> N/A
c. Use temporal words and phrases to signal event order.	<b>EEW.3.3.c.</b> N/A
d. Provide a sense of closure.	<b>EEW.3.3.d.</b> N/A
<b>Production and Distribution of Writing.</b>  <b>W.3.4.</b> With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	<b>EEW.3.4.</b> With guidance and support, produce writing that expresses more than one idea.
<b>W.3.5.</b> With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	<b>EEW.3.5.</b> With guidance and support from adults and peers, revise own writing by adding more information.
<b>W.3.6.</b> With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.	<b>EEW.3.6.</b> With guidance and support from adults, use technology to produce writing while interacting and collaborating with others.
<b>Research to Build and Present Knowledge.</b>  <b>W.3.7.</b> Conduct short research projects that build knowledge about a topic.	<b>EEW.3.7.</b> Gather information about a topic for a group research project.
<b>W.3.8.</b> Recall information from experiences or gather	<b>EEW.3.8.</b> Sort information into two provided categories and

CCSS Grade-Level Standards	Common Core Essential Elements
information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	write information learned about them.
<b>W.3.9.</b> (Begins in grade 4)	<b>EEW.3.9.</b> (Begins in grade 4.)
<p><b>Range of Writing.</b></p> <p><b>W.3.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>	<p><b>EEW.3.10.</b> Write routinely for a variety of tasks, purposes, and audiences.</p>

**Third Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.3.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 3 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</p>	<p><b>EESL.3.1.</b> Participate in collaborative opportunities.</p> <p>a. Engage in collaborative interactions about texts.</p>
<p>b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).</p>	<p><b>EESL.3.1.b.</b> Listen to others’ ideas before responding.</p>
<p>c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.</p>	<p><b>EESL.3.1.c.</b> Ask questions that link to ideas of others.</p>
<p>d. Explain their own ideas and understanding in light of the discussion.</p>	<p><b>EESL.3.1.d.</b> Express ideas clearly.</p>
<p><b>SL.3.2.</b> Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p>	<p><b>EESL.3.2.</b> Ask and answer questions about details from a text read aloud or information presented orally or through other media.</p>
<p><b>SL.3.3.</b> Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.</p>	<p><b>EESL.3.3.</b> Ask or answer questions about what a speaker says.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.3.4.</b> Report on a topic or text, a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.</p>	<p><b>EESL.3.4.</b> Recount a personal experience including details.</p>
<p><b>SL.3.5.</b> Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.</p>	<p><b>EESL.3.5.</b> Create a multimedia presentation of a story or poem.</p>
<p><b>SL.3.6.</b> Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.</p>	<p><b>EESL.3.6.</b> Combine words for effective communication to clarify thoughts, feelings, and ideas.</p>

### Third Grade English Language Arts Standards: Language

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.3.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.</p>	<p><b>EEL.3.1.</b> Demonstrate standard English grammar and usage when communicating.</p> <p>a. Uses noun + verb, noun + adjective, and subject + verb + object combinations in communication.</p>
<p>b. Form and use regular and irregular plural nouns.</p>	<p><b>EEL.3.1.b.</b> Use plural nouns.</p>
<p>c. Use abstract nouns (e.g., <i>childhood</i>).</p>	<p><b>EEL.3.1.c.</b> N/A</p>
<p>d. Form and use regular and irregular verbs.</p>	<p><b>EEL.3.1.d.</b> Use present and past tense verbs.</p>
<p>e. Form and use the simple (e.g., <i>I walked; I walk; I will walk</i>) verb tenses.</p>	<p><b>EEL.3.1.e.</b> N/A</p>
<p>f. Ensure subject-verb and pronoun-antecedent agreement.*[<i>sic</i>]</p>	<p><b>EEL.3.1.f.</b> N/A</p>
<p>g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.</p>	<p><b>EEL.3.1.g.</b> N/A</p>
<p>h. Use coordinating and subordinating conjunctions.</p>	<p><b>EEL.3.1.h.</b> Produce utterances using three or more words.</p>
<p>i. Produce simple, compound, and complex sentences.</p>	<p><b>EEL.3.1.i.</b> Ask simple questions.</p>
<p><b>L.3.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Capitalize appropriate words in titles.</p>	<p><b>EEL.3.2.</b> Apply conventions of standard English including capitalization and spelling.</p> <p>a. Capitalize the first letter of a familiar place.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
b. Use commas in addresses.	<b>EEL.3.2.b.</b> N/A
c. Use commas and quotation marks in dialogue	<b>EEL.3.2.c.</b> N/A
d. Form and use possessives	<b>EEL.3.2.d.</b> N/A
e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., <i>sitting, smiled, cries, happiness</i> ).	<b>EEL.3.2.e.</b> Spell common high-frequency words accurately.
f. Use spelling patterns and generalizations (e.g., <i>word families, position-based spellings, syllable patterns, ending rules, meaningful word parts</i> ) in writing words.	<b>EEL.3.2.f.</b> Use spelling patterns in familiar words with common spelling patterns to spell words with the same spelling pattern.
g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	<b>EEL.3.2.g.</b> Consult print in the environment to support reading and spelling.
<p><b>Knowledge of Language.</b></p> <p><b>L.3.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Choose words and phrases for effect.*[<i>sic</i>]</p>	<p><b>EEL.3.3.</b> Use language to achieve desired outcomes when communicating.</p> <p>a. Use language to make simple requests.</p>
b. Recognize and observe differences between the conventions of spoken and written standard English.	<b>EEL.3.3.b.</b> Use language to comment or share information.
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.3.4.</b> Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use sentence-level context as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.3.4.</b> Demonstrate knowledge of new vocabulary drawn from reading and content areas.</p> <p>a. N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., <i>agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat</i> ).	<b>EEL.3.4.b.</b> Identify the temporal meaning of words when common affixes (-ing, ed) are added to common verbs.
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company, companion</i> ).	<b>EEL.3.4.c.</b> N/A
d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	<b>EEL.3.4.d.</b> N/A
<b>L.3.5.</b> Demonstrate understanding of figurative language, word relationships and nuances in word meanings. a. Distinguish the literal and non-literal meanings of words and phrases in context (e.g., <i>take steps</i> ).	<b>EEL.3.5.</b> Demonstrate understanding of word relationships. a. N/A
b. Identify real-life connections between words and their use (e.g., describe people who are <i>friendly</i> or <i>helpful</i> ).	<b>EEL.3.5.b.</b> Identify real-life connections between words and their use (e.g., <i>happy</i> : "I am <i>happy</i> .").
c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew, believed, suspected, heard, and wondered</i> ).	<b>EEL.3.5.c.</b> Identify words that describe personal emotional states.
<b>L.3.6.</b> Acquire and use accurately grade-appropriate conversational, general academic and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i> ).	<b>EEL.3.6.</b> Demonstrate understanding of words that signal spatial and temporal relationships (e.g., <i>behind, under, after, soon, next, later</i> ).

## COMMON CORE ESSENTIAL ELEMENTS FOR FOURTH GRADE

### Fourth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.4.1.</b> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p><b>EERL.4.1.</b> Use details from the text to recount what the text says.</p>
<p><b>RL.4.2.</b> Determine a theme of a story, drama, or poem from details in the text; summarize the text.</p>	<p><b>EERL.4.2.</b> Determine the main idea of a text.</p>
<p><b>RL.4.3.</b> Describe in depth a character, setting, or event in a story or drama, drawing on specific detail in the text (e.g., a character’s thoughts, words, or actions).</p>	<p><b>EERL.4.3.</b> Use details from text to describe a character in a story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.4.4.</b> Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).</p>	<p><b>EERL.4.4.</b> Determine meaning of words in context.</p>
<p><b>RL.4.5.</b> Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.</p>	<p><b>EERL.4.5.</b> Recognize a text as a story or poem.</p>
<p><b>RL.4.6.</b> Compare and contrast the point of view from which different stories are narrated, including the difference between</p>	<p><b>EERL.4.6.</b> Identify the narrator of a story.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
first- and third-person narrations.	
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RL.4.7.</b> Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.</p>	<p><b>EERL.4.7.</b> Make connections between text and visual or oral presentations.</p>
<p><b>RL.4.8.</b> (Not applicable to literature)</p>	<p><b>EERL.4.8.</b> N/A</p>
<p><b>RL.4.9.</b> Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.</p>	<p><b>EERL.4.9.</b> Compare and contrast two stories, myths, or texts from different cultures.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.4.10.</b> By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>EERL.4.10.</b> **This Literature Essential Element references all elements above.</p>

**Fourth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.4.1.</b> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p><b>EERI.4.1.</b> Use details from the text to recount what the text says.</p>
<p><b>RI.4.2.</b> Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p>	<p><b>EERI.4.2.</b> Determine a main idea of a text.</p>
<p><b>RI.4.3.</b> Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.</p>	<p><b>EERI.4.3.</b> Use details from text to describe what happened.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.4.4.</b> Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a <i>grade 4 topic or subject area</i>.</p>	<p><b>EERI.4.4:</b> Determine meaning of words in context.</p>
<p><b>RI.4.5.</b> Describe the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in a text or part of a text.</p>	<p><b>EERI.4.5.</b> Identify the chronological structure of a text (first, then, next).</p>
<p><b>RI.4.6.</b> Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.</p>	<p><b>EERI.4.6.</b> Identify a firsthand account of an event.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.4.7.</b> Interpret information presented visually, orally, or</p>	<p><b>EERI.4.7.</b> Interpret information presented visually and orally.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	
<b>RI.4.8.</b> Explain how an author uses reasons and evidence to support particular points in a text.	<b>EERI.4.8.</b> Identify the author’s point.
<b>RI.4.9.</b> Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	<b>EERI.4.9.</b> Identify similarities of two resources on the same topic.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.4.10.</b> By the end of year read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<b>EERI.4.10.</b> **This Informational Text Essential Element references all elements above.



**Fourth Grade English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.4.3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</p>	<p><b>EERF.4.3.</b> Know and apply phonics and word analysis skills in decoding words.</p> <p>a. Apply letter-sound knowledge to use first letter plus context to identify unfamiliar words.</p>
<p>b. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</p>	<p><b>EERF.4.3.b.</b> Decode single-syllable words with common spelling patterns (consonant-vowel-consonant [CVC] or high-frequency rhymes).</p>
<p><b>Fluency.</b></p> <p><b>RF.4.4.</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p> <p>b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary. Decode multi-syllable words.</p>	<p><b>EERF.4.4.</b> Read text comprised of familiar words with accuracy and understanding.</p>

#### Fourth Grade English Language Arts Standards: Writing

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.4.1.</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <p>a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer’s purpose.</p>	<p><b>EEW.4.1.</b> Write an opinion about a topic or text and reasons to support the opinion.</p> <p>a. Select a topic or text and write an opinion about it.</p>
<p>b. Provide reasons that are supported by facts and details.</p> <p>c. Link opinion and reasons using words and phrases (e.g., <i>for instance, in order to, in addition</i>).</p>	<p><b>EEW.4.1.b-c.</b> List reasons to support the opinion.</p>
<p>d. Provide a concluding statement or section related to the opinion presented.</p>	<p><b>EEW.4.1.d.</b> N/A</p>
<p><b>W.4.2.</b> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</p>	<p><b>EEW.4.2.</b> Write to convey ideas and information clearly.</p> <p>a. Select a topic and related visual, tactual, or multimedia information.</p>
<p>b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</p>	<p><b>EEW.4.2.b.</b> List words, facts, or details related to the topic.</p>
<p>c. Link ideas within categories of information using words and phrases (e.g., <i>another, for example, also, because</i>).</p>	<p><b>EEW.4.2.c.</b> N/A</p>
<p>d. Use precise language and domain-specific vocabulary to</p>	<p><b>EEW.4.2.d.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
inform about or explain the topic.	
e. Provide a concluding statement or section related to the information or explanation presented.	<b>EEW.4.2.e.</b> N/A
<b>W.4.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.	<b>EEW.4.3.</b> Select an event or personal experience and write about it. a. Write about two events in sequence related to a personal experience.
b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.	<b>EEW.4.3.b.</b> List words that describe an event or personal experience to use when writing about it.
c. Use a variety of transitional words and phrases to manage the sequence of events.	<b>EEW.4.3.c.</b> N/A
d. Use concrete words and phrases and sensory details to convey experiences and events precisely.	<b>EEW.4.3.d.</b> N/A
e. Provide a conclusion that follows from the narrated experiences or events.	<b>EEW.4.3.e.</b> N/A
<b>Production and Distribution of Writing.</b> <b>W.4.4.</b> Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	<b>EEW.4.4.</b> Produce writing that expresses more than one idea with a logical organization.
<b>W.4.5.</b> With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	<b>EEW.4.5.</b> With guidance and support from adults and peers, plan by brainstorming and revise own writing by adding more information.

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>W.4.6.</b> With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.</p>	<p><b>EEW.4.6.</b> With guidance and support from adults, use technology, including the Internet, to produce writing while interacting and collaborating with others.</p>
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.4.7.</b> Conduct short research projects that build knowledge through investigation of different aspects of a topic.</p>	<p><b>EEW.4.7.</b> Gather information about a topic from two or more sources for a group research project.</p>
<p><b>W.4.8.</b> Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</p>	<p><b>EEW.4.8.</b> Recall information from personal experiences and sort into provided categories.</p>
<p><b>W.4.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 4 Reading standards</i> to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”).</p>	<p><b>EEW.4.9.</b> Recall information from literary and informational text to support writing.</p> <p>a. Apply <i>Essential Elements of Grade 4 Reading Standards</i> to literature (e.g., “Use details from text to describe a character in a story.”).</p>
<p>b. Apply <i>grade 4 Reading standards</i> to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).</p>	<p><b>EEW.4.9.b.</b> Apply <i>Essential Elements of Grade 4 Reading Standards</i> to informational text (e.g., “Use details from the text to recount what the text says.”).</p>
<p><b>Range of Writing.</b></p> <p><b>W.4.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>	<p><b>EEW.4.10.</b> Write routinely for a variety of tasks, purposes, and audiences.</p>

**Fourth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.4.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</p>	<p><b>EESL.4.1.a.</b> Participate in communicative exchanges to communicate directly with peers in multi-turn exchanges.</p> <p>a. Contribute ideas from prior knowledge and experience during discussions about text.</p>
<p>b. Follow agreed-upon rules for discussions and carry out assigned roles.</p>	<p><b>EESL.4.1.b.</b> Take turns in discussions with others.</p>
<p>c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.</p>	<p><b>EESL.4.1.c.</b> Ask and answer questions about information presented by others.</p>
<p>d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.</p>	<p><b>EESL.4.1.d.</b> Identify the key ideas of the discussion.</p>
<p><b>SL.4.2.</b> Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p>	<p><b>EESL.4.2.</b> Identify the main idea of a text presented through diverse media.</p>
<p><b>SL.4.3.</b> Identify the reasons and evidence a speaker provides to support particular points.</p>	<p><b>EESL.4.3.</b> Identify a point that the speaker makes.</p>
<p><b>Presentation of Knowledge and Ideas.</b></p>	<p><b>EESL.4.4.</b> Tell a story about a personal experience with supporting details.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>SL.4.4.</b> Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p>	
<p><b>SL.4.5.</b> Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.</p>	<p><b>EESL.4.5.</b> Add audio recordings or visuals to a presentation about a personally relevant topic.</p>
<p><b>SL.4.6.</b> Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.</p>	<p><b>EESL.4.6.</b> Differentiate between communication partners and contexts that call for formal and informal communication.</p>

**Fourth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.4.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>).</p>	<p><b>EEL.4.1.</b> Demonstrate standard English grammar and usage when communicating.</p> <p>a. Use possessive pronouns.</p>
<p>b. Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses.</p>	<p><b>EEL.4.1.b.</b> N/A</p>
<p>c. Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions.</p>	<p><b>EEL.4.1.c.</b> N/A</p>
<p>d. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>).</p>	<p><b>EEL.4.1.d.</b> Use comparative and superlative adjectives to describe people or objects.</p>
<p>e. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*[sic]</p>	<p><b>EEL.4.1.e.</b> Use common prepositions (e.g., <i>to, from, in, out, on, off, by, with</i>).</p>
<p>f. Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).*[sic]</p>	<p><b>EEL.4.1.f.</b> Communicate using grammatically complete utterances.</p>
<p><b>L.4.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use correct capitalization.</p>	<p><b>EEL.4.2.</b> Demonstrate capitalization, end punctuation, and spelling when communicating.</p> <p>a. Capitalize the first word in a sentence.</p>
<p>b. Use commas and quotation marks to mark direct speech and quotations from a text.</p>	<p><b>EEL.4.2.b.</b> N/A</p>
<p>c. Use a comma before a coordinating conjunction in a compound sentence.</p>	<p><b>EEL.4.2.c.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
d. Spell grade-appropriate words correctly, consulting references as needed.	<b>EEL.4.2.d.</b> Spell words phonetically, drawing on knowledge of letter-sound relationships, and/or common spelling patterns.
<b>Knowledge of Language.</b> <b>L.4.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely.*[sic]	<b>EEL.4.3.</b> Use language to convey meaning when writing or communicating. a. Use language to express emotion.
b. Choose punctuation for effect.*[sic]	<b>EEL.4.3.b.</b> N/A
c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).	<b>EEL.4.3.c.</b> Communicate effectively with peers and adults.
<b>Vocabulary Acquisition and Use.</b> <b>L.4.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.	<b>EEL.4.4.</b> Demonstrate knowledge of new vocabulary drawn from reading and content areas. a. Use context as a clue to guide selection of a word that completes a sentence read aloud by an adult.
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph</i> , <i>photograph</i> , <i>autograph</i> ).	<b>EEL.4.4.b.</b> Use frequently occurring root words (e.g., <i>talk</i> ) and the words that result when word endings are added (e.g., <i>talked</i> , <i>talking</i> , <i>talks</i> ).
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	<b>EEL.4.4.c.</b> N/A
<b>L.4.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	<b>EEL.4.5.</b> Demonstrate understanding of word relationships. a. N/A



CCSS Grade-Level Standards	Common Core Essential Elements
a. Explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i> ) in context.	
b. Recognize and explain the meaning of common idioms, adages, and proverbs.	<b>EEL.4.5.b.</b> Use common idioms (e.g., <i>no way, not a chance, you bet</i> ).
c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	<b>EEL.4.5.c.</b> Demonstrate understanding of opposites.
<b>L.4.6.</b> Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed, whined, stammered</i> ) and that are basic to a particular topic (e.g., <i>wildlife, conservation, and endangered</i> when discussing animal preservation).	<b>EEL.4.6.</b> Use domain-specific words.

## COMMON CORE ESSENTIAL ELEMENTS FOR FIFTH GRADE

### Fifth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.5.1.</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p><b>EERL.5.1.</b> Identify words in the text to answer a question about explicit information.</p>
<p><b>RL.5.2.</b> Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p>	<p><b>EERL.5.2.</b> Identify the central idea or theme of a familiar story, drama or poem.</p>
<p><b>RL.5.3.</b> Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).</p>	<p><b>EERL.5.3.</b> Compare and contrast two characters in a familiar story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.5.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.</p>	<p><b>EERL.5.4.</b> After listening to or reading a familiar text, determine the meanings of words and phrases.</p>
<p><b>RL.5.5.</b> Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.</p>	<p><b>EERL.5.5.</b> Identify the beginning, middle, and end of a poem, drama, or story with a clear sequential structure.</p>
<p><b>RL.5.6.</b> Describe how a narrator’s or speaker’s point of view influences how events are described.</p>	<p><b>EERL.5.6.</b> Determine the point of view of the narrator.</p>
<p><b>Integration of Knowledge and Ideas.</b></p>	<p><b>EERL.5.7.</b> Identify illustrations and multimedia elements that add</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RL.5.7.</b> Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).</p>	<p>to understanding of a text.</p>
<p><b>RL.5.8.</b> (Not applicable to literature)</p>	<p><b>EERL.5.8.</b> N/A</p>
<p><b>RL.5.9.</b> Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.</p>	<p><b>EERL.5.9.</b> Compare two stories with similar topics.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.5.10.</b> By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.</p>	<p><b>EERL.5.10.</b> **This Literature Essential Element references all elements above.</p>

**Fifth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.5.1.</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p><b>EERI.5.1.</b> Select words or phrases from the text to support inferences.</p>
<p><b>RI.5.2.</b> Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.</p>	<p><b>EERI.5.2.</b> When given text, identify the main ideas that are supported by the key details.</p>
<p><b>RI.5.3.</b> Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.</p>	<p><b>EERI.5.3.</b> Make connections between two individuals or events/actions in a text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.5.4.</b> Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 5 topic or subject area</i>.</p>	<p><b>EERI.5.4.</b> After listening to or reading a text, determine the meanings of domain-specific words and phrases.</p>
<p><b>RI.5.5.</b> Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.</p>	<p><b>EERI.5.5.</b> Identify the beginning, middle, and end of a text with a clear sequential structure.</p>
<p><b>RI.5.6.</b> Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.</p>	<p><b>EERI.5.6.</b> Given two pieces of information on the same event or topic, note what is the same.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.5.7.</b> Draw on information from multiple print or digital</p>	<p><b>EERI.5.7.</b> Use print or digital sources for information to answer a question.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	
<b>RI.5.8.</b> Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).	<b>EERI.5.8.</b> Identify the evidence or reasons the author uses to support points in text.
<b>RI.5.9.</b> Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	<b>EERI.5.9.</b> Collect information from two or more texts on the same topic to share information about a subject.
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.5.10.</b> By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.</p>	<b>EERI.5.10.</b> **This Informational Text Essential Element references all elements above.

**Fifth Grade English Language Arts Standards: Reading (Foundational Skills)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Phonics and Word Recognition.</b></p> <p><b>RF.5.3.</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</p>	<p><b>EERF.5.3.</b> Know and apply phonics and word analysis skills in decoding words.</p> <p>a. Decode two-syllable words.</p>
	<p><b>EERF.5.3.b.</b> Read more than 20 common high-frequency words.</p>
<p><b>Fluency.</b></p> <p><b>RF.5.4.</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. Read grade-level text with purpose and understanding.</p> <p>b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>	<p><b>EERF.5.4.</b> Read text comprised of familiar words with accuracy and understanding.</p>

**Fifth Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.5.1.</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <p>a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.</p>	<p><b>EEW.5.1.</b> Write an opinion about a topic or text and reasons to support the opinion.</p> <p>a. Introduce a topic or text and state an opinion about it.</p>
<p>b. Provide logically ordered reasons that are supported by facts and details.</p>	<p><b>EEW.5.1.b.</b> Provide reasons to support the opinion.</p>
<p>c. Link opinion and reasons using words, phrases, and clauses (e.g., <i>consequently, specifically</i>).</p>	<p><b>EEW.5.1.c.</b> N/A</p>
<p>d. Provide a concluding statement or section related to the opinion presented.</p>	<p><b>EEW.5.1.d.</b> N/A</p>
<p><b>W.5.2.</b> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</p>	<p><b>EEW.5.2.</b> Write to convey ideas and information clearly.</p> <p>a. Introduce a topic and organize illustrations or other multimedia related to it.</p>
<p>b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</p>	<p><b>EEW.5.2.b.</b> Provide facts, details, or other information related to the topic.</p>
<p>c. Link ideas within and across categories of information</p>	<p><b>EEW.5.2.c.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
using words, phrases, and clauses (e.g., <i>in contrast</i> , <i>especially</i> ).	
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	EEW.5.2.d. N/A
e. Provide a concluding statement or section related to the information or explanation presented.	EEW.5.2.e. N/A
<p><b>W.5.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <p>a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</p> <p>b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.</p>	<p><b>EEW.5.3.</b> Select an event or personal experience and write about it.</p> <p>a-b. Introduce the experience or situation, and follow with three or more events in sequence.</p>
c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events.	EEW.5.3.c. N/A
d. Use concrete words and phrases and sensory details to convey experiences and events precisely.	EEW.5.3.d. N/A
e. Provide a conclusion that follows from the narrated experiences or events.	EEW.5.3.e. N/A
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.5.4.</b> Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are</p>	<p><b>EEW.5.4.</b> Produce writing that is appropriate to task, purpose, and audience.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
defined in standards 1–3 above.)	
<b>W.5.5.</b> With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	<b>EEW.5.5.</b> With guidance and support from peers and adults, plan by brainstorming and revise own writing by adding more information.
<b>W.5.6.</b> With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.	<b>EEW.5.6.</b> With guidance and support from adults, use technology, including the Internet, to produce writing while interacting and collaborating with others.
<b>Research to Build and Present Knowledge.</b> <b>W.5.7.</b> Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	<b>EEW.5.7.</b> Conduct short research projects using two or more sources.
<b>W.5.8.</b> Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	<b>EEW.5.8.</b> Recall information from personal experiences or gather relevant information from print and digital sources to include in writing.
<b>W.5.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply <i>grade 5 Reading standards</i> to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact].”).	<b>EEW.5.9.</b> Use information from literary and informational text to support writing. a. Apply <i>Essential Elements of Grade 5 Reading Standards</i> to literature (e.g., “Compare and contrast two characters in the story.”).
b. Apply <i>grade 5 Reading standards</i> to informational texts (e.g.,	<b>EEW.5.9.b.</b> Apply <i>Essential Elements of Grade 5 Reading</i>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>“Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”).</p>	<p><i>Standards</i> to informational text (e.g., “Identify evidence the author uses.”).</p>
<p><b>Range of Writing.</b></p> <p><b>W.5.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>	<p><b>EEW.5.10.</b> Write routinely for a variety of tasks, purposes, and audiences.</p>

**Fifth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.5.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i>, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</p>	<p><b>EESL.5.1.</b> Participate in collaborative discussions.</p> <p>a. Prepare for discussions.</p>
<p>b. Follow agreed-upon rules for discussions and carry out assigned roles.</p>	<p><b>EESL.5.1.b.</b> Engage in discussions to share information on the topic.</p>
<p>c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</p>	<p><b>EESL.5.1.c.</b> Communicate directly with peers in multi-turn exchanges.</p>
<p>d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.</p>	<p><b>EESL.5.1.d.</b> Ask and answer questions of adult or peer communication partners to identify key issues of the discussion.</p>
<p><b>SL.5.2.</b> Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p>	<p><b>EESL.5.2.</b> Identify the main idea and supporting details of a text presented through diverse media.</p>
<p><b>SL.5.3.</b> Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.</p>	<p><b>EESL.5.3.</b> Identify the main point a speaker makes.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.5.4.</b> Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p>	<p><b>EESL.5.4.</b> Create a simple report or presentation about a curriculum-based topic.</p>
<p><b>SL.5.5.</b> Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p>	<p><b>EESL.5.5.</b> Select or create an audio recording, images, photographs, or other visuals/tactual displays to enhance a report or presentation.</p>
<p><b>SL.5.6.</b> Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p>	<p><b>EESL.5.6.</b> Use formal and informal language.</p>

**Fifth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.5.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.</p>	<p><b>EEL.5.1.</b> Demonstrate standard English grammar and usage when communicating.</p> <p>a. Use singular and plural nouns with matching verbs (e.g., <i>Sam eats, dogs eat</i>).</p>
<p>b. Form and use the perfect (e.g., <i>I had walked; I have walked; I will have walked</i>) verb tenses.</p>	<p><b>EEL.5.1.b.</b> N/A</p>
<p>c. Use verb tense to convey various times, sequences, states, and conditions.</p>	<p><b>EEL.5.1.c.</b> N/A</p>
<p>d. Recognize and correct inappropriate shifts in verb tense. *[sic]</p>	<p><b>EEL.5.1.d.</b> (See EEL.5.1.a.)</p>
<p>e. Use correlative conjunctions (e.g., <i>either/or, neither/nor</i>).</p>	<p><b>EEL.5.1.e.</b> Use frequently occurring conjunctions: <i>and, but, or, for, because</i>.</p>
<p><b>L.5.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use punctuation to separate items in a series. *[sic]</p>	<p><b>EEL.5.2.</b> Use conventions of standard English.</p> <p>a. Capitalize names and the first word in a sentence.</p>
<p>b. Use a comma to separate an introductory element from the rest of the sentence.</p>	<p><b>EEL.5.2.b.</b> Use a period to mark the end of a sentence.</p>
<p>c. Use a comma to set off the words <i>yes</i> and <i>no</i> (e.g., <i>Yes, thank you</i>), to set off a tag question from the rest of the sentence (e.g., <i>It's true, isn't it?</i>), and to indicate direct address (e.g., <i>Is that you, Steve?</i>).</p>	<p><b>EEL.5.2.c.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
d. Use underlining, quotation marks, or italics to indicate titles of works.	<b>EEL.5.2.d.</b> N/A
e. Spell grade-appropriate words correctly, consulting references as needed.	<b>EEL.5.2.e.</b> Spell untaught word phonetically, drawing on letter-sound relationships and common spelling patterns.
<p><b>Knowledge of Language.</b></p> <p><b>L.5.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p>	<b>EEL.5.3.</b> Use language to achieve desired meaning when communicating.
b. Compare and contrast the varieties of English (e.g., <i>dialects, registers</i> ) used in stories, dramas, or poems.	<b>EEL.5.3.b.</b> N/A
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.5.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.</p>	<b>EEL.5.4.</b> Determine or clarify the meaning of vocabulary drawn from reading and content areas. <p>a. Use context as a clue to determine the meaning of words.</p>
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>photograph, photosynthesis</i> ).	<b>EEL.5.4.b.</b> Identify the temporal meaning of words when common affixes (-ing, -ed, -s, -es) are added to common nouns and verbs.
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	<b>EEL.5.4.c.</b> N/A

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>L.5.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figurative language, including similes and metaphors, in context.</p>	<p><b>EEL.5.5.</b> Demonstrate understanding of word relationships.</p> <p>a. Use simple, common idioms (e.g., <i>You bet!</i>, <i>It's a deal.</i>, <i>We're cool.</i>).</p>
<p>b. Recognize and explain the meaning of common idioms, adages, and proverbs.</p>	<p><b>EEL.5.5.b.</b> N/A</p>
<p>c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.</p>	<p><b>EEL.5.5.c.</b> N/A</p>
<p><b>L.5.6.</b> Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., <i>however</i>, <i>although</i>, <i>nevertheless</i>, <i>similarly</i>, <i>moreover</i>, <i>in addition</i>).</p>	<p><b>EEL.5.6.</b> Use domain-specific words (e.g., <i>if</i>, <i>then</i>, <i>next</i>).</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR SIXTH GRADE

### Sixth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.6.1.</b> Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERL.6.1.</b> Determine what a text says explicitly as well as what simple inferences should be drawn.</p>
<p><b>RL.6.2.</b> Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</p>	<p><b>EERL.6.2.</b> Determine the theme or central idea of a familiar story and identify details that relate to it.</p>
<p><b>RL.6.3.</b> Describe how a particular story’s or drama’s plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.</p>	<p><b>EERL.6.3.</b> Identify the episodes or significant events in a story or drama.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.6.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.</p>	<p><b>EERL.6.4.</b> Determine the meaning of simple idioms and figures of speech as they are used in a text.</p>
<p><b>RL.6.5.</b> Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.</p>	<p><b>EERL.6.5.</b> Determine how a sentence, paragraph, scene, or stanza fits into the overall structure of the text.</p>
<p><b>RL.6.6.</b> Explain how an author develops the point of view of the narrator or speaker in a text.</p>	<p><b>EERL.6.6.</b> Use an example from a text to describe the point of view of the narrator.</p>
<p><b>Integration of Knowledge and Ideas.</b></p>	<p><b>EERL.6.7.</b> Compare a text version of a story, drama, or poem with</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RL.6.7.</b> Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch.</p>	<p>an audio, video, or live version of the text.</p>
<p><b>RL.6.8.</b> (Not applicable in literature.)</p>	<p><b>EERL.6.8.</b> N/A</p>
<p><b>RL.6.9.</b> Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.</p>	<p><b>EERL.6.9.</b> (See EERL.6.7.)</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.6.10.</b> By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>EERL.6.10.</b> **This Literature Essential Element references all elements above.</p>

**Sixth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.6.1.</b> Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERI.6.1.</b> Analyze a text to determine what it says explicitly as well as what inferences should be drawn.</p>
<p><b>RI.6.2.</b> Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</p>	<p><b>EERI.6.2.</b> Determine the central idea of a short passage and details or facts related to it.</p>
<p><b>RI.6.3.</b> Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).</p>	<p><b>EERI.6.3.</b> Identify the progression of a key individual, event, or idea throughout an informational text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.6.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.</p>	<p><b>EERI.6.4.</b> Determine the meaning of simple idioms and figures of speech as they are used in a text.</p>
<p><b>RI.6.5.</b> Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.</p>	<p><b>EERI.6.5.</b> Describe how an element of the text fits into the overall structure of the text.</p>
<p><b>RI.6.6.</b> Determine an author’s point of view or purpose in a text and explain how it is conveyed in the text.</p>	<p><b>EERI.6.6.</b> Use an example from text to describe the author’s purpose or point of view.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.6.7.</b> Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to</p>	<p><b>EERI.6.7.</b> Integrate information from different media and formats of texts.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
develop a coherent understanding of a topic or issue.	
<b>RI.6.8.</b> Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	<b>EERI.6.8.</b> Distinguish claims in a text supported by reason.
<b>RI.6.9.</b> Compare and contrast one author’s presentation of events with that of another (e.g., a memoir written by and a biography on the same person).	<b>EERI.6.9.</b> (See EERI.6.7.)
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.6.10.</b> By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<b>EERI.6.10.</b> **This Informational Text Essential Element references all elements above.

**Sixth Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.6.1.</b> Write arguments to support claims with clear reasons and relevant evidence.</p> <p>a. Introduce claim(s) and organize the reasons and evidence clearly.</p> <p>b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.</p>	<p><b>EEW.6.1.a-b.</b> With guidance and support, write a claim and support it with reasons.</p>
<p>c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.</p>	<p><b>EEW.6.1.c.</b> N/A</p>
<p>d. Establish and maintain a formal style.</p>	<p><b>EEW.6.1.d.</b> N/A</p>
<p>e. Provide a concluding statement or section that follows from the argument presented.</p>	<p><b>EEW.6.1.e.</b> N/A</p>
<p><b>W.6.2.</b> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</p>	<p><b>EEW.6.2.a-b.</b> Write to convey ideas and information including facts, details, and other information.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
c. Use appropriate transitions to clarify the relationships among ideas and concepts.	EEW.6.2.c. N/A
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	EEW.6.2.d. N/A
e. Establish and maintain a formal style.	EEW.6.2.e. N/A
f. Provide a concluding statement or section that follows from the information or explanation presented.	EEW.6.2.f. N/A
<p><b>W.6.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.</p> <p>b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.</p>	<p><b>EEW.6.3.</b> Select an event or personal experience and write about it.</p> <p>a-b. Introduce the experience or situation, at least one character, and two or more events in sequence.</p>
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.	EEW.6.3.c. N/A
d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.	EEW.6.3.d. N/A
e. Provide a conclusion that follows from the narrated experiences or events.	EEW.6.3.e. N/A
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.6.4.</b> Produce clear and coherent writing in which the</p>	<p><b>EEW.6.4.</b> Produce writing that is appropriate for the task, purpose, or audience.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	
<b>W.6.5.</b> With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	<b>EEW.6.5.</b> With guidance and support from adults and peers, plan by brainstorming and revise own writing by adding more information.
<b>W.6.6.</b> Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.	<b>EEW.6.6.</b> Use technology, including the Internet, to produce writing while interacting and collaborating with others.
<b>Research to Build and Present Knowledge.</b> <b>W.6.7.</b> Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	<b>EEW.6.7.</b> Conduct research to answer a question based on two or more sources of information.
<b>W.6.8.</b> Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	<b>EEW.6.8.</b> Identify quotes from print or digital sources that provide information about a topic.
<b>W.6.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply <i>grade 6 Reading standards</i> to literature (e.g., “Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics.”).	<b>EEW.6.9.</b> Use information from literary and informational text to support writing. a. Apply <i>Essential Elements of Grade 6 Reading Standards</i> to literature (e.g., “Compare a text version of a story, drama, or poem with an audio, video, or live version of the text.”).
b. Apply <i>grade 6 Reading standards</i> to literary nonfiction (e.g.,	<b>EEW.6.9.b.</b> Apply <i>Essential Elements of Grade 6 Reading</i>

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
“Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not”).	<i>Standards</i> to informational text (e.g., “Distinguish claims in a text supported by reason.”).

**Sixth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.6.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p>	<p><b>SL.6.1.</b> Participate in collaborative discussions.</p> <p>a. Prepare for discussion through prior study.</p>
<p>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.</p>	<p><b>SL.6.1.b.</b> With guidance and support from adults and peers, follow simple, agreed-upon rules for discussions and contribute information.</p>
<p>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.</p>	<p><b>SL.6.1.c.</b> Ask and answer questions specific to the topic, text, or issue under discussion.</p>
<p>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.</p>	<p><b>SL.6.1.d.</b> Restate key ideas expressed in the discussion.</p>
<p><b>SL.6.2.</b> Interpret information presented in diverse media and formats (e.g., visually, quantitatively, or orally) and explain how it contributes to a topic, text, or issue under study.</p>	<p><b>EESL.6.2.</b> Identify information presented in graphical, oral, visual, or multimodal formats that relates to a topic or text.</p>
<p><b>SL.6.3.</b> Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence</p>	<p><b>EESL.6.3.</b> Identify points the speaker makes to support an argument or claim.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
from claims that are not.	
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.6.4.</b> Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.</p>	<p><b>EESL.6.4.</b> Present findings including descriptions, facts, or details related to a topic.</p>
<p><b>SL.6.5.</b> Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.</p>	<p><b>EESL.6.5.</b> Select an auditory, visual, or tactual display to clarify the information in presentations.</p>
<p><b>SL.6.6.</b> Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p><b>EESL.6.6.</b> Use formal and informal language as appropriate to the communication partner and situation.</p>

**Sixth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.6.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Ensure that pronouns are in the proper case (subjective, objective, possessive).</p>	<p><b>EEL.6.1.</b> Demonstrate standard English grammar and usage when communicating.</p> <p>a. Use personal pronouns (e.g., <i>he, she, they</i>) correctly.</p>
<p>b. Use intensive pronouns (e.g., <i>myself, ourselves</i>).</p>	<p><b>EEL.6.1.b.</b> N/A</p>
<p>c. Recognize and correct inappropriate shifts in pronoun number and person.*[sic]</p>	<p><b>EEL.6.1.c.</b> N/A</p>
<p>d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*[sic]</p>	<p><b>EEL.6.1.d.</b> N/A</p>
<p>e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*[sic]</p>	<p><b>EEL.6.1.e.</b> N/A</p>
<p><b>L.6.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/ parenthetical elements.*[sic]</p>	<p><b>EEL.6.2.</b> Demonstrate understanding of conventions of standard English when writing.</p> <p>a. Use question marks at the end of written questions.</p>
<p>b. Spell correctly.</p>	<p><b>EEL.6.2.b.</b> Spell untaught words phonetically, drawing on letter-sound relationships and common spelling patterns.</p>
<p><b>Knowledge of Language.</b></p> <p><b>L.6.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p>	<p><b>EEL.6.3.</b> Use language to achieve desired meaning in communication.</p> <p>a. Vary use of language when the listener or reader does not understand the initial attempt.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
a. Vary sentence patterns for meaning, reader/listener interest, and style. *[sic]	
b. Maintain consistency in style and tone. *[sic]	<b>EEL.6.3.b.</b> N/A
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.6.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.6.4.</b> Demonstrate knowledge of vocabulary drawn from reading and content areas.</p> <p>a. Use context to identify which word in an array of content-related words is missing from a sentence.</p>
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>audience</i> , <i>auditory</i> , <i>audible</i> ).	<b>EEL.6.4.b.</b> N/A
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.	<b>EEL.6.4.c.</b> Seek clarification and meaning support when unfamiliar words are encountered while reading or communicating
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	<b>EEL.6.4.d.</b> N/A
<p><b>L.6.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>b. Interpret figures of speech (e.g., personification) in context.</p>	<p><b>EEL.6.5.</b> Demonstrate word relationships.</p> <p>a. Interpret similes (e.g., The man was as big as a tree.).</p>
b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.	<b>EEL.6.5.b.</b> N/A

CCSS Grade-Level Standards	Common Core Essential Elements
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>stingy</i> , <i>scrimping</i> , <i>economical</i> , <i>unwasteful</i> , <i>thrifty</i> ).	EEL.6.5.c. N/A
L.6.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	EEL.6.6. Use general academic and domain-specific words and phrases.

## COMMON CORE ESSENTIAL ELEMENTS AND ACHIEVEMENT DESCRIPTORS FOR SEVENTH GRADE

### Seventh Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.7.1.</b> Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERL.7.1.</b> Cite text to draw inferences from stories and poems.</p>
<p><b>RL.7.2.</b> Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.</p>	<p><b>EERL.7.2.</b> Determine the theme or central idea of a text and identify the details that relate to it.</p>
<p><b>RL.7.3.</b> Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).</p>	<p><b>EERL.7.3.</b> Recognize the relationship of two story elements.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.7.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.</p>	<p><b>EERL.7.4.</b> Use rhyme and other repetitions of words or sounds (e.g., alliteration) to support understanding of a poem or a section of a story or drama.</p>
<p><b>RL.7.5.</b> Analyze how a drama’s or poem’s form or structure (e.g., soliloquy, sonnet) contributes to its meaning.</p>	<p><b>EERL.7.5.</b> Determine how poetry form and structure contributes to its meaning.</p>
<p><b>RL.7.6.</b> Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.</p>	<p><b>EERL.7.6.</b> Identify how a character’s point of view is the same or different from another character.</p>
<p><b>Integration of Knowledge and Ideas.</b></p>	<p><b>EERL.7.7.</b> Compare a video version of a story, poem, or drama to</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RL.7.7.</b> Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).</p>	<p>a text-based version of the same story, poem, or drama.</p>
<p><b>RL.7.8.</b> (Not applicable to literature)</p>	<p><b>EERL.7.8.</b> N/A</p>
<p><b>RL.7.9.</b> Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.</p>	<p><b>EERL.7.9.</b> Recognize the difference between fictional characters and nonfictional characters.</p>
<p><b>Range of Reading and Level of Text Complexity</b></p> <p><b>RL.7.10.</b> By the end of the year read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>EERL.7.10.</b> **This Essential Element references all elements above.</p>

**Seventh Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.7.1.</b> Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERI.7.1.</b> Cite text to draw inferences from informational text.</p>
<p><b>RI.7.2.</b> Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.</p>	<p><b>EERI.7.2.</b> Determine two central ideas that progress throughout the text.</p>
<p><b>RI.7.3.</b> Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).</p>	<p><b>EERI.7.3.</b> Identify interactions between individuals, events, or ideas in text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.7.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.</p>	<p><b>EERI.7.4.</b> Determine the meaning of words and phrases as they are used in an informational text.</p>
<p><b>RI.7.5.</b> Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.</p>	<p><b>EERI.7.5.</b> Determine how headings, key words, and key phrases relate to the topic of a text.</p>
<p><b>RI.7.6.</b> Determine an author’s point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.</p>	<p><b>EERI.7.6.</b> Determine author’s point of view and compare to own point of view</p>
<p><b>Integration of Knowledge and Ideas.</b></p>	<p><b>EERI.7.7.</b> Compare the experience of reading a text to listening or</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RI.7.7.</b> Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium’s portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).</p>	<p>watching a video of the same text.</p>
<p><b>RI.7.8.</b> Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.</p>	<p><b>EERI.7.8.</b> Delineate the specific claims for text.</p>
<p><b>RI.7.9.</b> Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.</p>	<p><b>EERI.7.9.</b> Compare information provided by authors of two different texts on the same topic.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.7.10.</b> By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>EERI.7.10.</b> **This Essential Element references all elements above.</p>



### Seventh Grade English Language Arts Standards: Writing

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.7.1.</b> Write arguments to support claims with clear reasons and relevant evidence.</p> <p>a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.</p> <p>b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</p>	<p><b>EEW.7.1.a-b.</b> Write a claim and support it with reasons or other relevant evidence.</p>
<p>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.</p>	<p><b>EEW.7.1.c.</b> N/A</p>
<p>d. Establish and maintain a formal style.</p>	<p><b>EEW.7.1.d.</b> N/A</p>
<p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p><b>EEW.7.1.e.</b> N/A</p>
<p><b>W.7.2.</b> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant facts, definitions, concrete</p>	<p><b>EEW.7.2.a-b.</b> Write to convey ideas and information including facts, details, and other information as well as graphics and multimedia as needed.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
details, quotations, or other information and examples.	
c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.	<b>EEW.7.2.c.</b> N/A
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	<b>EEW.7.2.d.</b> Use domain-specific vocabulary when writing about a topic.
e. Establish and maintain a formal style.	<b>EEW.7.2.e.</b> N/A
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	<b>EEW.7.2.f.</b> N/A
<p><b>W.7.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.</p> <p>Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.</p>	<p><b>EEW.7.3.</b> Select an event or personal experience and write about it.</p> <p>a-b. Introduce the experience or situation, at least one character, and two or more events in sequence.</p>
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.	<b>EEW.7.3.c.</b> N/A
d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.	<b>EEW.7.3.d.</b> N/A
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	<b>EEW.7.3.e.</b> N/A
<b>Production and Distribution of Writing.</b>	<b>EEW.7.4.</b> Produce writing that is appropriate for the task,

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>W.7.4.</b> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>purpose, or audience.</p>
<p><b>W.7.5.</b> With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p>	<p><b>EEW.7.5.</b> With guidance and support from adults and peers, plan by brainstorming and revise own writing by adding more information.</p>
<p><b>W.7.6.</b> Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.</p>	<p><b>EEW.7.6.</b> Use technology, including the Internet, to produce writing to interact and collaborate with others.</p>
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.7.7.</b> Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.</p>	<p><b>EEW.7.7.</b> Conduct research to answer a question based on multiple sources of information.</p>
<p><b>W.7.8.</b> Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p>	<p><b>EEW.7.8.</b> Select quotes from multiple print or digital sources that provides important information about a topic.</p>
<p><b>W.7.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place,</p>	<p><b>EEW.7.9.</b> Use information from literary and informational text to support writing.</p> <p>a. Apply <i>Essential Elements of Grade 7 Reading Standards</i> to literature (e.g., “Recognize the difference between fictional</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).</p>	<p>characters and nonfictional characters.”).</p>
<p>b. Apply grade 7 Reading standards to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</p>	<p><b>EEW.7.9.b.</b> Apply <i>Essential Elements of Grade 7 Reading Standards</i> to informational text (e.g., “Delineate the specific claims in a text.”).</p>
<p><b>Range of Writing.</b></p> <p><b>W.7.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p>	<p><b>EEW.7.10.</b> Write routinely for a variety of tasks, purposes, and audiences.</p>

**Seventh Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.7.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p>	<p><b>EESL.7.1.</b> Engage in a range of collaborative discussions.</p> <p>a. Come to discussions prepared to share information.</p>
<p>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.</p>	<p><b>EESL.7.1.b.</b> With guidance and support from adults and peers, follow simple, agreed-upon rules for discussions and carry out assigned roles.</p>
<p>c. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.</p>	<p><b>EESL.7.1.c.</b> Remain on the topic of the discussion when asking or answering questions or making other contributions.</p>
<p>d. Acknowledge new information expressed by others and, when warranted, modify their own views.</p>	<p><b>EESL.7.1.d.</b> Accept when others involved in the discussion agree or disagree with own perspective.</p>
<p><b>SL.7.2.</b> Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.</p>	<p><b>EESL.7.2.</b> Identify the main idea of information presented in graphical, oral, visual, or multimodal formats that relate to a topic, text, or issue under study.</p>
<p><b>SL.7.3.</b> Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and the relevance and</p>	<p><b>EESL.7.3.</b> Determine whether the claims made by a speaker are fact or opinion.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
sufficiency of the evidence.	
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.7.4.</b> Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</p>	<p><b>EESL.7.4.</b> Present findings including descriptions, facts, or details related to a main idea or theme.</p>
<p><b>SL.7.5.</b> Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.</p>	<p><b>EESL.7.5.</b> Select or create an audio recording, images, photographs, or other visual/tactual displays to emphasize points in presentations.</p>
<p><b>SL.7.6.</b> Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p><b>EESL.7.6.</b> Communicate precisely (i.e., provide complete information) or efficiently (i.e., telegraphic communication) as required by the context, task, and communication partner.</p>

**Seventh Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.7.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of phrases and clauses in general and their function in specific sentences.</p>	<p><b>EEL.7.1.</b> Demonstrate standard English grammar and usage when writing or communicating.</p> <p>a. Produce simple complete sentences when writing or communicating.</p>
<p>b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas</p>	<p><b>EEL.7.1.b.</b> N/A</p>
<p>c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.*[sic]</p>	<p><b>EEL.7.1.c.</b> N/A</p>
<p><b>L.7.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie; but not, He wore an old[,] green shirt.</i>)</p>	<p><b>EEL.7.2.</b> Demonstrate understanding of conventions of standard English when writing.</p> <p>a. Use end punctuation when writing a sentence or question.</p>
<p>b. Spell correctly.</p>	<p><b>EEL.7.2.b.</b> Spell words phonetically, drawing on knowledge of letter-sound relationships and/or common spelling patterns.</p>
<p><b>Knowledge of Language.</b></p> <p><b>L.7.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and</p>	<p><b>EEL.7.3.</b> Use language to achieve desired meaning when writing or communicating.</p> <p>a. Use precise language as required to achieve desired meaning.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
redundancy.*[sic]	
<p><b>Vocabulary Acquisition and Use.</b></p> <p>L.7.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.7.4.</b> Demonstrate knowledge of new vocabulary drawn from reading and content areas.</p> <p>a. Use context to identify which word in an array of content related words is missing from a sentence.</p>
<p>b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).</p>	<p><b>EEL.7.4.b.</b> N/A</p>
<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p>	<p><b>EEL.7.4.c.</b> Seek clarification and meaning support when unfamiliar words are encountered while reading or communicating.</p>
<p>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</p>	<p><b>EEL.7.4.d.</b> N/A</p>
<p><b>L.7.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.</p>	<p><b>EEL.7.5.</b> Demonstrate an understanding of word relationships.</p> <p>a. Demonstrate understanding of synonyms and antonyms.</p>
<p>b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.</p>	<p><b>EEL.7.5.b.</b> N/A</p>
<p>c. Distinguish among the connotations (associations) of words</p>	<p><b>EEL.7.5.c.</b> N/A</p>



CCSS Grade-Level Standards	Common Core Essential Elements
with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).	
<b>L.7.6.</b> Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	<b>EEL.7.6.</b> Use general academic and domain-specific words and phrases.

## COMMON CORE ESSENTIAL ELEMENTS FOR EIGHTH GRADE

### Eighth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.8.1.</b> Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERL.8.1.</b> Cite text to support inferences from stories and poems.</p>
<p><b>RL.8.2.</b> Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.</p>	<p><b>EERL.8.2.</b> Provide a summary of a familiar text.</p>
<p><b>RL.8.3.</b> Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.</p>	<p><b>EERL.8.3.</b> Identify which incidents in a story or drama lead to subsequent action.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.8.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</p>	<p><b>EERL.8.4.</b> Determine meanings of words and phrases in literature including figurative language.</p>
<p><b>RL.8.5.</b> Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.</p>	<p><b>EERL.8.5.</b> Compare and contrast the structure of two or more texts.</p>
<p><b>RL.8.6.</b> Analyze how differences in the points of view of the</p>	<p><b>EERL.8.6.</b> Determine the difference in the points of view of a</p>

CCSS Grade-Level Standards	Common Core Essential Elements
characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	character and the audience or reader in a text with suspense or humor.
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RL.8.7.</b> Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.</p>	<p><b>EERL.8.7.</b> Compare and contrast a scene from a filmed or live production of a story or drama to the text or script.</p>
<p><b>RL.8.8.</b> (Not applicable to literature)</p>	<p><b>EERL.8.8.</b> N/A</p>
<p><b>RL.8.9.</b> Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.</p>	<p><b>EERL.8.9.</b> Compare and contrast themes, patterns of events, or characters across two or more stories or dramas.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.8.10.</b> By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.</p>	<p><b>EERL.8.10.</b> **This Essential Element references all elements above.</p>

**Eighth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.8.1.</b> Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERI.8.1.</b> Cite text to support inferences from informational text.</p>
<p><b>RI.8.2.</b> Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.</p>	<p><b>EERI.8.2.</b> Provide a summary of a familiar informational text.</p>
<p><b>RI.8.3.</b> Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).</p>	<p><b>EERI.8.3.</b> Make connections between key individuals or events in a text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.8.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</p>	<p><b>EERI.8.4.</b> Determine meanings of words and phrases in informational text including figurative language.</p>
<p><b>RI.8.5.</b> Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.</p>	<p><b>EERI.8.5.</b> Determine the role of sentences in a paragraph (e.g., topic sentence, supporting details, and examples).</p>
<p><b>RI.8.6.</b> Determine an author’s point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.</p>	<p><b>EERI.8.6.</b> Determine an author’s purpose or point of view.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.8.7.</b> Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.</p>	<p><b>EERI.8.7.</b> Select medium based on the advantages and disadvantages of using print, digital text, video, or multimedia to present a topic or idea.</p>
<p><b>RI.8.8.</b> Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.</p>	<p><b>EERI.8.8.</b> Determine whether claims in a text are fact or opinion.</p>
<p><b>RI.8.9.</b> Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.</p>	<p><b>EERI.8.9.</b> Compare and contrast the key information in two different texts on the same topic.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.8.10.</b> By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.</p>	<p><b>EERI.8.10.</b> **This Essential Element references all elements above.</p>

### Eighth Grade English Language Arts Standards: Writing

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.8.1.</b> Write arguments to support claims with clear reasons and relevant evidence.</p> <p>a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</p> <p>b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</p>	<p><b>EEW.8.1.a-b.</b> Write an argument to support claims with one clear reason or piece of evidence.</p>
<p>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</p>	<p><b>EEW.8.1.c.</b> N/A</p>
<p>d. Establish and maintain a formal style.</p>	<p><b>EEW.8.1.d.</b> N/A</p>
<p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p><b>EEW.8.1.e.</b> N/A</p>
<p><b>W.8.2.</b> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other</p>	<p><b>EEW.8.2.a-b.</b> Write to convey ideas and information clearly including facts, details, and other information as well as graphics and multimedia as needed.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
information and examples.	
c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.	EEW.8.2.c. N/A
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	EEW.8.2.d. N/A
e. Establish and maintain a formal style.	EEW.8.2.e. N/A
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	EEW.8.2.f. N/A
<p><b>W.8.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.</p> <p>b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.</p>	<p><b>EEW.8.3.</b> Select an event or personal experience and write about it.</p> <p>a-b. Introduce the experience or situation, at least one character, and two or more events in sequence.</p>
c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.	EEW.8.3.c. N/A
d. Use precise words and phrases relevant descriptive details and sensory language to capture the action and convey experiences and events.	EEW.8.3.d. N/A
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	EEW.8.3.e. N/A

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.8.4.</b> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p><b>EEW.8.4.</b> Produce writing that is appropriate for the task, purpose, or audience.</p>
<p><b>W.8.5.</b> With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.</p>	<p><b>EEW.8.5.</b> With guidance and support from adults and peers, plan by brainstorming and revise own writing by adding more information.</p>
<p><b>W.8.6.</b> Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.</p>	<p><b>EEW.8.6.</b> Use technology, including the Internet, to produce writing to interact and collaborate with others.</p>
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.8.7.</b> Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</p>	<p><b>EEW.8.7.</b> Conduct short research projects to answer and pose questions based on one source of information.</p>
<p><b>W.8.8.</b> Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</p>	<p><b>EEW.8.8.</b> Select quotes from multiple print or digital sources that provide important information about a topic.</p>
<p><b>W.8.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 8 Reading standards</i> to literature (e.g., “Analyze</p>	<p><b>EEW.8.9.</b> Use information from literary and informational text to support writing.</p> <p>a. Apply <i>Essential Elements of Grade 8 Reading Standards</i> to</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<p>how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).</p>	<p>literature (e.g., “Compare and contrast themes, patterns of events, or characters across two or more stories or dramas.”).</p>
<p>b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).</p>	<p><b>EEW.8.9.b.</b> Apply <i>Essential Elements of Grade 8 Reading Standards</i> to informational text (e.g., “Determine whether claims in a text are fact or opinion.”).</p>
<p><b>Range of Writing.</b></p> <p><b>W.8.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two).</p>	<p><b>EEW.8.10.</b> Write routinely for a variety of tasks, purposes, and audiences.</p>

**Eighth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.8.1.</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly.</p> <p>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</p>	<p><b>EESL.8.1.</b> Listen and communicate with a variety of partners in order to discuss issues regarding the content.</p> <p>a. Come to discussions prepared to share information previously studied.</p>
<p>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.</p>	<p><b>EESL.8.1.b.</b> Follow simple rules and carry out assigned roles during discussions.</p>
<p>c. Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas.</p> <p>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.</p>	<p><b>EESL.8.1.c-d.</b> Respond to others’ questions and comments by answering questions regarding content.</p>
<p><b>SL.8.2.</b> Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.</p>	<p><b>EESL.8.2.</b> Describe the purpose of information presented in graphical, oral, visual, or multimodal formats.</p>
<p><b>SL.8.3.</b> Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and relevance and</p>	<p><b>EESL.8.3.</b> Determine whether claims in an oral presentation are fact or opinion.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
sufficiency of the evidence and identifying when irrelevant evidence is introduced.	
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.8.4.</b> Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.</p>	<p><b>EESL.8.4.</b> Present findings including relevant details.</p>
<p><b>SL.8.5.</b> Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.</p>	<p><b>EESL.8.5.</b> Integrate multimedia and visual information into presentations.</p>
<p><b>SL.8.6.</b> Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.</p>	<p><b>EESL.8.6.</b> Adapt communication to a variety of contexts and tasks using complete sentences when indicated or appropriate.</p>

**Eighth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.8.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Explain the function of verbals (gerunds, participles, infinitives) in general and their functions in particular sentences.</p>	<p><b>EEL.8.1.</b> Demonstrate conventions of standard English grammar when writing or communicating.</p> <p>a. N/A</p>
<p>b. Form and use verbs in the active and passive voice.</p>	<p><b>EEL.8.1.b.</b> Form and use the simple verb tenses (e.g., <i>I walked, I walk, I will walk</i>).</p>
<p>c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.</p>	<p><b>EEL.8.1.c.</b> N/A</p>
<p>d. Recognize and correct inappropriate shifts in verb voice and mood.*[sic]</p>	<p><b>EEL.8.1.d.</b> Use appropriate verbs to match nouns.</p>
<p><b>L.8.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.</p>	<p><b>EEL.8.2.</b> Demonstrate understanding of conventions of standard English when writing.</p> <p>a. Use end punctuation and capitalization when writing a sentence or question.</p>
<p>b. Use an ellipsis to indicate an omission.</p>	<p><b>EEL.8.2.b.</b> N/A</p>
<p>c. Spell correctly.</p>	<p><b>EEL.8.2.c.</b> Spell words phonetically, drawing on knowledge of letter-sound relationships and/or common spelling patterns.</p>
<p><b>Knowledge of Language.</b></p> <p><b>L.8.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p>	<p><b>EEL.8.3.</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Use to-be verbs (<i>am, are, is, was, were, be, become, became</i>) accurately when writing and communicating.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).</p>	
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.8.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on <i>grade 8 reading and content</i>, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.8.4.</b> Demonstrate knowledge of new vocabulary drawn from reading and content areas.</p> <p>a. Use context to identify which word in an array of content related words is missing from a sentence.</p>
<p>b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>precede</i>, <i>recede</i>, <i>secede</i>).</p>	<p><b>EEL.8.4.b.</b> N/A</p>
<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.</p>	<p><b>EEL.8.4.c.</b> Seek clarification and meaning support when unfamiliar words are encountered while reading or communicating.</p>
<p>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</p>	<p><b>EEL.8.4.d.</b> N/A</p>
<p><b>L.8.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., verbal irony, puns) in context.</p>	<p><b>EEL.8.5.</b> Demonstrate an understanding of word relationships.</p> <p>a. Demonstrate understanding of the use of multiple meaning words.</p>
<p>b. Use the relationship between particular words to better</p>	<p><b>EEL.8.5.b.</b> Use knowledge of common words to understand the</p>

CCSS Grade-Level Standards	Common Core Essential Elements
understand each of the words.	meaning of compound and complex words in which they appear (e.g., birdhouse, household).
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>bullheaded</i> , <i>willful</i> , <i>firm</i> , <i>persistent</i> , <i>resolute</i> ).	<b>EEL.8.5.c.</b> Use descriptive words to add meaning when writing and communicating.
<b>L.8.6.</b> Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	<b>EEL.8.6.</b> Acquire and use general academic and domain-specific words and phrases.

## COMMON CORE ESSENTIAL ELEMENTS FOR NINTH-TENTH GRADE

### Ninth-Tenth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.9-10.1.</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERL.9-10.1.</b> Determine which citations demonstrate what the text says explicitly as well as inferences drawn from the text.</p>
<p><b>RL.9-10.2.</b> Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.</p>	<p><b>EERL.9-10.2.</b> Determine the central idea of the text and select details that relate to it; recount the text.</p>
<p><b>RL.9-10.3.</b> Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.</p>	<p><b>EERL.9-10.3.</b> Describe interactions between characters.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.9-10.4.</b> Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).</p>	<p><b>EERL.9-10.4.</b> Determine the meaning of words and phrases as they are used in a text, including common analogies and figures of speech.</p>
<p><b>RL.9-10.5.</b> Analyze how an author’s choices concerning how to structure a text, order events within it (e.g., parallel plots), and</p>	<p><b>EERL.9-10.5.</b> Determine the sequence of events in a story or drama.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	
<b>RL.9-10.6.</b> Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.	<b>EERL.9-10.6.</b> Connect the experiences of characters in a story or drama from outside of the U.S. with personal experience.
<b>Integration of Knowledge and Ideas.</b> <b>RL.9-10.7.</b> Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden’s “Musée des Beaux Arts” and Breughel’s Landscape with the Fall of Icarus).	<b>EERL.9-10.7.</b> Compare the representation of a subject or topic in two different artistic mediums (e.g., poetry and illustration).
<b>RL.9-10.8.</b> (Not applicable to literature)	<b>EERL.9-10.8.</b> N/A
<b>RL.9-10.9.</b> Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).	<b>EERL.9-10.9.</b> Identify when an author references one text to another text.
<b>Range of Reading and Level of Text Complexity.</b> <b>RL.9-10.10.</b> By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.	<b>EERL.9-10.10.</b> **This Essential Element references all elements above.



**Ninth-Tenth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.9-10.1.</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p><b>EERI.9-10.1.</b> Determine which citations demonstrate what the text says explicitly as well as inferentially.</p>
<p><b>RI.9-10.2.</b> Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.</p>	<p><b>EERI.9-10.2.</b> Determine the central idea of the text and select details to support it.</p>
<p><b>RI.9-10.3.</b> Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.</p>	<p><b>EERI.9-10.3.</b> Determine connections drawn between ideas or events in informational text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.9-10.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).</p>	<p><b>EERI.9-10.4.</b> Determine meanings of words and phrases in informational text including figurative language.</p>
<p><b>RI.9-10.5.</b> Analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).</p>	<p><b>EERI.9-10.5.</b> Determine which sentences in a text support the claims of the author.</p>
<p><b>RI.9-10.6.</b> Determine an author’s point of view or purpose in a</p>	<p><b>EERI.9-10.6.</b> Determine an author’s purpose or point of view.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
text and analyze how an author uses rhetoric to advance that point of view or purpose.	
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.9-10.7.</b> Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account.</p>	<p><b>EERI.9-10.7.</b> Compare a selection of informational text about a person with another medium.</p>
<p><b>RI.9-10.8.</b> Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.</p>	<p><b>EERI.9-10.8.</b> Delineate statements that support an argument.</p>
<p><b>RI.9-10.9.</b> Analyze seminal U.S. documents of historical and literary significance (e.g., Washington’s Farewell Address, the Gettysburg Address, Roosevelt’s Four Freedoms speech, King’s “Letter from Birmingham Jail”), including how they address related themes and concepts.</p>	<p><b>EERI.9-10.9.</b> Make connections between U.S. documents of historical and literary significance based on related themes and concepts.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.9-10.10.</b> By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range.</p> <p>By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.</p>	<p><b>EERI.9-10.10.</b> **This Literature Essential Element references all elements above.</p>

**Ninth-Tenth Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.9-10.1.</b> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <p>a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.</p> <p>b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level and concerns.</p>	<p><b>EEW.9-10.1.a-b.</b> Write about a personal opinion and give more than one reason supporting and rejecting the claim.</p>
<p>c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p>	<p><b>EEW.9-10.1.c.</b> N/A</p>
<p>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p>	<p><b>EEW.9-10.1.d.</b> N/A</p>
<p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p><b>EEW.9-10.1.e.</b> N/A</p>
<p><b>W.9-10.2.</b> Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and</p>	<p><b>EEW.9-10.2.a-b.</b> Write to convey ideas and information using clear organization and including facts, details, and other information as well as graphics and multimedia as needed.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>analysis of content.</p> <p>a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</p>	
<p>c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>	<p><b>EEW.9-10.2.c.</b> N/A</p>
<p>d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.</p>	<p><b>EEW.9-10.2.d.</b> N/A</p>
<p>e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p>	<p><b>EEW.9-10.2.e.</b> N/A</p>
<p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<p><b>EEW.9-10.2.f.</b> N/A</p>
<p><b>W.9-10.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple</p>	<p><b>EEW.9-10.3.</b> Select an event or personal experience and write about it.</p> <p>a-b. Introduce an experience or situation, at least one character, and describe multiple events in sequence.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.</p> <p>b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.</p>	
<p>c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole.</p>	<p><b>EEW.9-10.3.c.</b> N/A</p>
<p>d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.</p>	<p><b>EEW.9-10.3.d.</b> N/A</p>
<p>e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<p><b>EEW.9-10.3.e.</b> N/A</p>
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.9-10.4.</b> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p><b>EEW.9-10.4.</b> Produce writing that is appropriate to a particular task, purpose, and audience.</p>
<p><b>W.9-10.5.</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p>	<p><b>EEW.9-10.5.</b> Develop writing by planning and revising own writing by adding more information.</p>
<p><b>W.9-10.6.</b> Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information</p>	<p><b>EEW.9-10.6.</b> Use technology, including the Internet, to produce, publish, and update individual or shared writing products.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
and to display information flexibly and dynamically.	
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.9-10.7.</b> Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p>	<p><b>EEW.9-10.7.</b> Conduct short research projects to answer questions posed by self and others using multiple sources of information.</p>
<p><b>W.9-10.8.</b> Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.</p>	<p><b>EEW.9-10.8.</b> Select information from multiple sources and use the information to write answers to research questions.</p>
<p><b>W.9-10.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grades 9–10 Reading standards</i> to literature (e.g., “Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]”).</p>	<p><b>EEW.9-10.9.</b> Use information from literary and informational text to support writing.</p> <p>a. Apply <i>Essential Elements of Grade 9-10 Reading Standards</i> to literature (e.g., “Identify when an author has drawn upon or included references to another text.”).</p>
<p>b. Apply <i>grades 9–10 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning”).</p>	<p><b>EEW.9-10.9.b.</b> Apply <i>Essential Elements of Grade 9-10 Reading Standards</i> to informational text (e.g., “Delineate statements that support an argument.”).</p>
<p><b>Range of Writing.</b></p>	<p><b>EEW.9-10.10.</b> Write routinely over time for a range of tasks,</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>W.9-10.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</p>	<p>purposes, and audiences.</p>

**Ninth-Tenth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.9-10.1.</b> Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.</p> <p>a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.</p>	<p><b>EESL.9-10.1.</b> Initiate and participate in collaborative discussions.</p> <p>a. Prepare for discussions by collecting information on the topic.</p>
<p>b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.</p>	<p><b>EESL.9-10.1.b.</b> Work with peers to set rules for discussions.</p>
<p>c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.</p>	<p><b>EESL.9-10.1.c.</b> Ask and answer questions during a discussion.</p>
<p>d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.</p>	<p><b>EESL.9-10.1.d.</b> Indicate agreement or disagreement with others during discussions.</p>



CCSS Grade-Level Standards	Common Core Essential Elements
<b>SL.9-10.2.</b> Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.	<b>EESL.9-10.2.</b> Determine the credibility of information presented in diverse media or formats.
<b>SL.9-10.3.</b> Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	<b>EESL.9-10.3.</b> Determine whether a claim made by a speaker is credible (e.g., fact or opinion; supported or unsupported).
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.9-10.4.</b> Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.</p>	<b>EESL.9-10.4.</b> Present information logically with an organization that is appropriate to the purpose, audience, and task.
<b>SL.9-10.5.</b> Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	<b>EESL.9-10.5.</b> Use digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to support understanding.
<b>SL.9-10.6.</b> Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	<b>EESL.9-10.6.</b> Adapt communication to a variety of contexts and tasks using complete sentences when indicated or appropriate.

**Ninth-Tenth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.9-10.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Use parallel structure.*[<i>sic</i>]</p>	<p><b>EEL.9-10.1.</b> Demonstrate knowledge of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. N/A</p>
<p>b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.</p>	<p><b>EEL.9-10.1.b.</b> Use a variety of parts of speech (nouns, verbs, pronouns, adjectives, and prepositions) in writing or communication to convey information.</p>
<p><b>L.9-10.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.</p>	<p><b>EEL.9-10.2.</b> Demonstrate understanding of use of conventions of standard English writing.</p> <p>a. Use correct punctuation when writing.</p>
<p>b. Use a colon to introduce a list or quotation.</p>	<p><b>EEL.9-10.2.b.</b> N/A</p>
<p>c. Spell correctly.</p>	<p><b>EEL.9-10.2.c.</b> Spell most single-syllable words correctly and apply knowledge of word chunks in spelling longer words.</p>
<p><b>Knowledge of Language.</b></p> <p><b>L.9-10.3.</b> Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> <p>a. Write and edit work so that it conforms to the guidelines in a</p>	<p><b>EEL.9-10.3.</b> Use knowledge of language to achieve desired meaning when writing or communicating.</p> <p>a. Write and revise work so that it communicates clearly to the intended audience.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
style manual (e.g., <i>MLA Handbook</i> , <i>Turabian’s Manual for Writers</i> ) appropriate for the discipline and writing type.	
<p><b>Vocabulary Acquisition and Use.</b></p> <p><b>L.9-10.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 9–10 reading and content</i>, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.9-10.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words.</p> <p>a. Use context to determine the meaning of unknown words.</p>
<p>b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., <i>analyze, analysis, analytical; advocate, advocacy</i>).</p>	<p><b>EEL.9-10.4.b.</b> N/A</p>
<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.</p>	<p><b>EEL.9-10.4.c.</b> Consult reference materials (dictionaries, online vocabulary supports) to clarify the meaning of unfamiliar words encountered when reading.</p>
<p>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</p>	<p><b>EEL.9-10.4.d.</b> See EEL.9-10.4.c. above.</p>
<p><b>L.9-10.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.</p>	<p><b>EEL.9-10.5.</b> Demonstrate understanding of multiple meaning of words and figurative language.</p> <p>a. Distinguish understanding of multiple meaning of words and figures of speech.</p>
<p>b. Analyze nuances in the meaning of words with similar denotations.</p>	<p><b>EEL.9-10.5.b.</b> N/A</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>L.9-10.6.</b> Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>	<p><b>EEL.9-10.6.</b> Acquire and use general academic and domain-specific words and phrases.</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR ELEVENTH-TWELFTH GRADE

### Eleventh-Twelfth Grade English Language Arts Standards: Reading (Literature)

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RL.11-12.1.</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p><b>EERL.11-12.1.</b> Cite textual evidence to determine where the text leaves matters uncertain.</p>
<p><b>RL.11-12.2.</b> Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.</p>	<p><b>EERL.11-12.2.</b> Provide a summary of an unfamiliar text.</p>
<p><b>RL.11-12.3.</b> Analyze the impact of the author’s choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).</p>	<p><b>EERL.11-12.3.</b> Explain how characters develop over the course of a story.</p>
<p><b>Craft and Structure.</b></p> <p><b>RL.11-12.4.</b> Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)</p>	<p><b>EERL.11-12.4.</b> Determine how words or phrases with multiple meanings have an impact on meaning or tone of a text.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RL.11-12.5.</b> Analyze how an author’s choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.</p>	<p><b>EERL.11-12.5.</b> Determine how the author’s choice of where to end the story contributes to the meaning.</p>
<p><b>RL.11-12.6.</b> Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).</p>	<p><b>EERL.11-12.6.</b> Identify the intended meaning to match what an author wrote.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RL.11-12.7.</b> Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)</p>	<p><b>EERL.11-12.7.</b> Compare two or more interpretations (e.g., recorded or live production of a play or recorded novel or poetry) of a story, drama, or poem.</p>
<p><b>RL.11-12.8.</b> (Not applicable to literature)</p>	<p><b>EERL.11-12.8.</b> N/A</p>
<p><b>RL.11-12.9.</b> Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.</p>	<p><b>EERL.11-12.9.</b> Compare and contrast elements of American literature to other literary works, self, or one’s world. (Compare themes, topics, locations, context, and point of view.)</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RL.11-12.10.</b> By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p><b>EERL.11-12.10.</b> **This Literature Essential Element references all elements above.</p>

**Eleventh-Twelfth Grade English Language Arts Standards: Reading (Informational Text)**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Key Ideas and Details.</b></p> <p><b>RI.11-12.1.</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p><b>EERI.11-12.1.</b> Cite textual evidence to determine where informational text leaves matters uncertain.</p>
<p><b>RI.11-12.2.</b> Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.</p>	<p><b>EERI.11-12.2.</b> Provide a summary of an informational text.</p>
<p><b>RI.11-12.3.</b> Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.</p>	<p><b>EERI.11-12.3.</b> Explain how specific events develop over the course of the text.</p>
<p><b>Craft and Structure.</b></p> <p><b>RI.11-12.4.</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10).</p>	<p><b>EERI.11-12.4.</b> Determine the meaning of words or phrases within an informational text.</p>
<p><b>RI.11-12.5.</b> Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</p>	<p><b>EERI.11-12.5.</b> Determine how the author’s choice of where to make an argument contributes to the meaning.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>RI.11-12.6.</b> Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.</p>	<p><b>EERI.11-12.6.</b> Determine how the author’s style affects the purpose of the text.</p>
<p><b>Integration of Knowledge and Ideas.</b></p> <p><b>RI.11-12.7.</b> Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.</p>	<p><b>EERI.11-12.7.</b> Analyze information presented in different media on related topics to answer questions or solve problems.</p>
<p><b>RI.11-12.8.</b> Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., <i>The Federalist</i>, presidential addresses).</p>	<p><b>EERI.11-12.8.</b> Explain how U.S. texts inform citizens’ rights.</p>
<p><b>RI.11-12.9.</b> Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features.</p>	<p><b>EERI.11-12.9.</b> Determine the purposes of foundational U. S. documents of historical significance.</p>
<p><b>Range of Reading and Level of Text Complexity.</b></p> <p><b>RI.11-12.10.</b> By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the</p>	<p><b>EERI.11-12.10.</b> **This Essential Element references all elements above.</p>



<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
range.	

**Eleventh-Twelfth Grade English Language Arts Standards: Writing**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Text Types and Purposes.</b></p> <p><b>W.11-12.1.</b> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <p>a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.</p> <p>b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.</p>	<p><b>EEW.11-12.1.a-b.</b> Write to express an opinion with supporting information about a topic or text and a concluding statement.</p>
<p>c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p>	<p><b>EEW.11-12.1.c.</b> N/A</p>
<p>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the</p>	<p><b>EEW.11-12.1.d.</b> N/A</p>
<p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p><b>EEW.11-12.1.e.</b> N/A</p>
<p><b>W.11-12.2.</b> Write informative/explanatory texts to examine and</p>	<p><b>EEW.11-12.2.a-b.</b> Write to convey ideas and information using</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</p>	<p>clear organization and including facts, details, and other information as well as graphics and multimedia as needed.</p>
<p>c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>	<p><b>EEW.11-12.2.c.</b> N/A</p>
<p>d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.</p>	<p><b>EEW.11-12.2.d.</b> N/A</p>
<p>e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p>	<p><b>EEW.11-12.2.e.</b> N/A</p>
<p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<p><b>EEW.11-12.2.f.</b> N/A</p>
<p><b>W.11-12.3.</b> Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p>	<p><b>EEW.11-12.3.</b> Select an event or personal experience and write about it.</p> <p>a-c. Introduce an experience or situation, at least one</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.</p> <p>b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.</p> <p>c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).</p>	<p>character, and describe multiple events in sequence.</p>
<p>d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.</p>	<p><b>EEW.11-12.3.d.</b> N/A</p>
<p>e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<p><b>EEW.11-12.3.e.</b> N/A</p>
<p><b>Production and Distribution of Writing.</b></p> <p><b>W.11-12.4.</b> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p><b>EEW.11-12.4.</b> Produce writing that is appropriate to a particular task, purpose, and audience.</p>
<p><b>W.11-12.5.</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific</p>	<p><b>EEW.11-12.5.</b> Develop and strengthen writing as needed by planning, revising, editing, and rewriting.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
purpose and audience.	
<b>W.11-12.6.</b> Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.	<b>EEW.11-12.6.</b> Use technology, including the Internet, to produce, publish and update an individual or shared writing project.
<p><b>Research to Build and Present Knowledge.</b></p> <p><b>W.11-12.7.</b> Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p>	<b>EEW.11-12.7.</b> Conduct short research projects to answer questions posed by self and others using multiple sources of information.
<b>W.11-12.8.</b> Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.	<b>EEW.11-12.8.</b> Select information from multiple sources and use the information to write answers to research questions.
<p><b>W.11-12.9.</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grades 11–12 Reading standards</i> to literature (e.g., “Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics”).</p>	<p><b>EEW.11-12.9.</b> Cite evidence from literary or informational texts.</p> <p>a. Apply <i>Grades 11-12 Essential Elements for Reading Standards</i> to literature (e.g., “Compare and contrast elements of American literature to other literary works, self, or one’s world. [Compare themes, topics, locations, context, and point of view].”).</p>
a. Apply <i>grades 11–12 Reading standards</i> to literary nonfiction	<b>EEW.11-12.9.b.</b> Apply <i>Essential Elements of Grade 11-12 Reading</i>

CCSS Grade-Level Standards	Common Core Essential Elements
<p>(e.g., “Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes, and arguments in works of public advocacy [e.g., <i>The Federalist</i>, presidential addresses]”).</p>	<p><i>Standards</i> to nonfictional or informational texts (e.g., “Explain how U.S. texts inform citizens’ rights.”).</p>
<p><b>Range of Writing.</b></p> <p><b>W.11-12.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</p>	<p><b>EEW.11-12.10.</b> Write routinely over extended time frames (time for research, reflection, and revision) for a range of tasks, purposes, and audiences.</p>

**Eleventh-Twelfth Grade English Language Arts Standards: Speaking and Listening**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Comprehension and Collaboration.</b></p> <p><b>SL.11-12.1.</b> Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.</p> <p>a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.</p>	<p><b>EESL.11-12.1.</b> Initiate and participate in collaborative discussions.</p> <p>a. Prepare for discussions by collecting information on the topic.</p>
<p>b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.</p>	<p><b>EESL.11-12.1.b.</b> Work with peers to set rules, goals, and deadlines to promote democratic discussions.</p>
<p>c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.</p>	<p><b>EESL.11-12.1.c.</b> Ask and answer questions to verify or clarify own ideas and understandings during a discussion.</p>
<p>d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.</p>	<p><b>EESL.11-12.1.d.</b> Restate comments or claims made by others during a discussion.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>SL.11-12.2.</b> Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</p>	<p><b>EESL.11-12.2.</b> Determine the credibility and accuracy of information presented across diverse media or formats.</p>
<p><b>SL.11-12.3.</b> Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.</p>	<p><b>EESL.11-12.3.</b> Determine whether the claims made by a speaker are credible (e.g., fact or opinion; supported or unsupported).</p>
<p><b>Presentation of Knowledge and Ideas.</b></p> <p><b>SL.11-12.4.</b> Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</p>	<p><b>EESL.11-12.4.</b> Present information and findings as well as alternative or opposing information, with an organization that is appropriate to the purpose, audience, and task.</p>
<p><b>SL.11-12.5.</b> Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.</p>	<p><b>EESL.11-12.5.</b> Use digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to support understanding.</p>
<p><b>SL.11-12.6.</b> Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11-12 Language Standards 1 and 3 for specific expectations.)</p>	<p><b>EESL.11-12.6.</b> Adapt communication to a variety of contexts and tasks using complete sentences when indicated or appropriate.</p>



**Eleventh-Twelfth Grade English Language Arts Standards: Language**

CCSS Grade-Level Standards	Common Core Essential Elements
<p><b>Conventions of Standard English.</b></p> <p><b>L.11-12.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested.</p>	<p><b>EEL.11-12.1.</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Apply understandings that conventions of English are required in some forms of communication (e.g., writing a letter to advocate for something) but not in others (e.g., writing an e-mail or a text message to a friend).</p>
<p>b. Resolve issues of complex or contested usage, consulting references (e.g., <i>Merriam-Webster’s Dictionary of English Usage</i>, <i>Garner’s Modern American Usage</i>) as needed.</p>	<p><b>EEL.11-12.1.b.</b> Use appropriate resources to resolve issues involving grammar usage, punctuation, and spelling (e.g., end of sentence punctuation, commas, question marks, exclamation points, hyphenation, parentheses, and colons).</p>
<p><b>L.11-12.2.</b> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Observe hyphenation conventions.</p>	<p><b>EEL.11-12.2.</b> Apply knowledge of conventions of English grammar to convey desired meaning in writing and communication.</p>
<p>b. Spell correctly.</p>	<p><b>EEL.11-12.2.b.</b> N/A</p>
<p><b>Knowledge of Language.</b></p> <p><b>L.11-12.3.</b> Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p> <p>a. Vary syntax for effect, consulting references (e.g., Tufte’s <i>Artful Sentences</i>) for guidance as needed; apply an understanding of syntax to the study of complex texts when</p>	<p><b>EEL.11-12.3.</b> Use knowledge of language to achieve desired meaning when writing or communicating.</p> <p>a. Vary sentence structure using a variety of simple and compound sentence structures.</p>

CCSS Grade-Level Standards	Common Core Essential Elements
reading.	
<p><b>L.11-12.4.</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 11–12 reading and content</i>, choosing flexibly from a range of strategies.</p> <p>a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</p>	<p><b>EEL.11-12.4.</b> Demonstrate knowledge of the meaning of words and phrases drawn reading and academic content.</p> <p>a. Use context to determine the meaning of unknown words.</p>
<p>b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., <i>conceive, conception, conceivable</i>).</p>	<p><b>EEL.11-12.4.b.</b> N/A</p>
<p>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.</p>	<p><b>EEL.11-12.4.c.</b> N/A</p>
<p>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</p>	<p><b>EEL.11-12.4.d.</b> Consult reference materials (dictionaries, online vocabulary supports) to clarify the meaning of unfamiliar words encountered when reading.</p>
<p><b>L.11-12.5.</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text.</p>	<p><b>EEL.11-12.5.</b> Demonstrate understanding of figurative language and words relationships.</p> <p>a. Interpret simple figures of speech encountered while reading or listening.</p>
<p>b. Analyze nuances in the meaning of words with similar denotations.</p>	<p><b>EEL.11-12.5.b.</b> N/A</p>
<p><b>L.11-12.6.</b> Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career</p>	<p><b>EEL.11-12.6.</b> Use academic and domain-specific words and phrases for communication appropriate for the student’s educational plans and career goals.</p>

<b>CCSS Grade-Level Standards</b>	<b>Common Core Essential Elements</b>
readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	

## GLOSSARY OF ENGLISH LANGUAGE ARTS TERMS

**Adapted text (simplified).** Substitutes linguistically frequently occurring vocabulary for infrequently occurring nontechnical vocabulary, shortens sentence length, lowers reading level, and restructures sentences to reduce their complexity. See [http://www.coursecrafters.com/ELL-Outlook/2006/mar\\_apr/ELLOutlookITIArticle1.htm](http://www.coursecrafters.com/ELL-Outlook/2006/mar_apr/ELLOutlookITIArticle1.htm)

**Adapted text (elaborated).** Clarifies, elaborates, and explains implicit information and makes connections explicit with words sometimes added to increase comprehension. See [http://www.coursecrafters.com/ELL-Outlook/2006/mar\\_apr/ELLOutlookITIArticle1.htm](http://www.coursecrafters.com/ELL-Outlook/2006/mar_apr/ELLOutlookITIArticle1.htm)

**Assistive technology.** Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities. See <http://standards.gov/assistivetechology.cfm>

**Context clues.** Bits of information from the text that, when combined with the reader's own knowledge, help the reader determine the meaning of the text, or unknown words in the text.

**Decoding.** Understanding that a printed word represents the spoken word, and that this printed word is made of a sequence of phonemes.

**Digital literacy.** Ability to use digital technology, communication tools, or networks to locate, evaluate, use and create information; ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers; person's ability to perform tasks effectively in a digital environment. Literacy includes the ability to read and interpret media, to reproduce data and images through digital manipulation, and to evaluate and apply new knowledge gained from digital environments. See <http://www.library.illinois.edu/digit/definition.html>

**Digital tools.** Tools that involve or relate to the use of a computer/technology.

**Distracters.** An incorrect choice among multiple-choice answers on a question or test. See <http://dictionary.reference.com/browse/distractor>

**Encode.** To represent complicated information in a simple or short way.

**Episode.** A brief unit of action in a literary work; a situation that is part of a narrative.

**Figurative language.** Uses "figures of speech" as a way of saying something other than the literal meaning of the words (e.g., All the world's a stage.); hyperbole, metaphor, onomatopoeia.

**Figurative meaning.** Exaggerated or altered meaning of words used as a figure of speech (e.g., She swims like a dolphin (simile); figurative meaning is that she swims very well.).

**Formal language.** Adheres to stricter grammar rules, does not follow informal, spontaneous language (language between friends).

**Graphic organizer.** A diagram or pictorial device used to record and show relationships among ideas or information. An example could be a Venn diagram or a T-chart.

**Guided writing activities/lessons.** Temporary, small group lessons teaching strategies that students most need to practice with guidance from a teacher. See <http://www.readwritethink.org/professional-development/strategy-guides/guided-writing-30685.html>

**High-frequency words.** Words that appear frequently in writing, reading, and language.

**Hyperbole.** Way of speaking or writing (emphatic exaggeration) that makes someone or something sound bigger, better, more, etc. than they are (e.g., You've grown like a bean sprout!).

**Idiom.** Words in a fixed order that have a particular meaning that is different from the meaning of each word separately (e.g., "Bitten off more than you can chew."; "It's raining cats and dogs."; and "A little under the weather.")

**Independent writing.** Children write their own pieces, such as stories and informational narratives, retellings, labeling, speech balloons, lists, etc. See [http://www.oe.k12.mi.us/balanced\\_literacy/independent\\_writing.htm](http://www.oe.k12.mi.us/balanced_literacy/independent_writing.htm)

**Inference.** Assuming that something is true or forming an opinion based on information.

**Informational (natural) language.** Refers to spontaneous language (language between friends) that has less strict grammar rules and/or shorter sentences.

**Informational text.** Text that intends to provide information on a particular topic (e.g., an essay written about the Battle of Gettysburg).

**Informational essay/text/writing.** Writing that intends to provide information on a particular topic (e.g., Students write informational pieces about the effects of global warming, the impact of women in politics, and the salaries and endorsements in professional sports.).

**Intonation.** The sound changes produced by the rise and fall of the voice when speaking, especially when this has an effect on the meaning of what is said.

**Literary elements.** Characterizations, setting(s), plot(s) (including exposition, rising action, climax, and falling action), and theme(s) developed by an author over the course of a story.

**Metaphor.** An expression (figure of speech) which describes a person or object in a literary way by referring to something that is considered to have similar characteristics to the person or object being described, such as "The mind is an ocean," and "The city is a jungle."

**Multimedia book.** Combines media of communication (e.g., text, graphics, and sound).

**Multimodal.** Having or involving several or a combination of learning styles, modes, or modalities (e.g., auditory, kinesthetic, visual, or a combination).

**Onomatopoeia.** The creation and use of words which include sounds that are similar to the noises (imitates) that the words refer to (e.g., hiss, buzz, bang, or the word “zip” imitates the sound of zipping up one’s coat).

**Open-ended questions.** A question beginning with such words as *what, why, how, describe that* are designed to encourage a full, meaningful answer using the subject’s own knowledge and/or feelings. See <http://www.mediacollege.com/journalism/interviews/open-ended-questions.html> and [http://changingminds.org/techniques/questioning/open\\_closed\\_questions.htm](http://changingminds.org/techniques/questioning/open_closed_questions.htm)

**Phonemes.** Abstract units of the phonetic system of a language that corresponds to a set of similar speech sounds (as the velar \k\ of cool and the palatal \k\ of keel) which are perceived to be a single distinctive sound in the language. See <http://www.merriam-webster.com/dictionary/phoneme>

**Phonetic spelling.** The representation of vocal sounds which express pronunciations of words and a system of spelling in which each letter represents invariably the same spoken sound. See <http://dictionary.reference.com/help/faq/language/s08.html>

**Picture exchange cards (PECS).** Originally created by Pyramid Products as a tool for communicating with non-verbal people on the spectrum. Since its invention, though, “PECS” has become shorthand for any kind of image-based communication.

**Prompt levels/prompt hierarchy.** To make something happen.

- **Verbal prompts** - Statements that help learners acquire target skills (e.g., “You might need to try it a different way,” “Write your name.”).
- **Gestural prompts** - Movements that cue learners to use a particular behavior or skill (e.g., pointing to the top of the paper where the learner needs to write his name).
- **Model prompts** - Models the target skill or behavior. Full model prompts can be verbal if the skill being taught is verbal, or they can be motor responses if the skill being taught involves moving a body part.
- **Physical prompts** - Touches to help a student use the target behavior or skill (e.g., tapping a learner’s hand to cue writing, putting hand over learner’s to help writing).
- **Visual prompts** - Pictures of events that provide learners with information about how to use the target skill or behavior (e.g., task analysis checklist, transition picture card). See <http://autismpdc.fpg.unc.edu/content/prompting>

**Roots (morphemes).** The most basic form of a word that is still able to convey a particular thought or meaning.

**Segmental phonemes.** One of the phonemes (as \ k, a, t \ in cat, tack, act) of a language that can be assigned to a relative sequential order of minimal segments. See <http://www.merriam-webster.com/dictionary/segmental%20phoneme>

**Sensory language/sensory words.** Words that refer to the senses of sight, touch, hearing, smell, and taste that can help add realism to writing.

**Shared reading.** An interactive reading experience where children interact with the reading of a big book or other enlarged text as guided by a teacher or other experienced reader, generally accomplished using an enlarged text that all children can see. See [http://www.oe.k12.mi.us/balanced\\_literacy/shared\\_reading.htm](http://www.oe.k12.mi.us/balanced_literacy/shared_reading.htm)

**Shared writing activity/modeled writing.** An approach to writing where the teacher and children work together to compose messages and stories where children provide the ideas and the teacher supports the process as a scribe. The message is usually related to some individual or group experience. The teacher provides full support, modeling and demonstrating the process of putting children's ideas into written language. See [http://www.oe.k12.mi.us/balanced\\_literacy/modeled\\_writing.htm](http://www.oe.k12.mi.us/balanced_literacy/modeled_writing.htm)

**Short essay.** Literary composition on a single subject, usually presenting the personal view of the author. See <http://www.thefreedictionary.com/essay>

**Simile.** The use of an expression (figure of speech) comparing one thing with another, always including the words “as” or “like” (e.g., She swims like a dolphin.).

**Social story.** Describes a situation, skill, or concept in terms of relevant social cues, perspectives, and common responses and shares accurate social information that is easily understood by its audience. See <http://www.thegraycenter.org/social-stories/what-are-social-stories>

**Speech/voice-to-text technology.** A type of speech recognition program that converts spoken to written language. See <http://searchunifiedcommunications.techtarget.com/definition/voice-to-text>

**Spatial and temporal relationships/meaning words.** Signal event order (e.g., *behind, under, after, soon, next, and later*).

**Story elements.** Plot, setting, genre, point of view, characters, and order of events.

**Textual evidence.** Evidence from one or more texts used to support an argument/position, and is derived from reading and drawing from other text(s). It is provided in the form of quotation, paraphrase, descriptions of theory, and also description. See [http://wiki.answers.com/Q/What\\_is\\_a\\_textual\\_evidence](http://wiki.answers.com/Q/What_is_a_textual_evidence)

**Theme or central idea.** Main thought or topic in a work of literature

**Vivid verbs.** Words that express an action with an implied emphasis (e.g., “He sprinted down the street,” or “He dashed down the street,” rather than “He ran down the street.”).

**Word family.** Groups of words that have a common feature or pattern (also known as phonograms, rhymes, or chunks). *At, cat, hat,* and *fat* are a family of words with the "at" sound and letter combination in common. Common word families include: *ack, ain, ake, ale, all, ame, an, ank, ap, ash, at, ate, aw, ay, eat, ell, est, ice, ick, ide, ight, ill, in, ine, ing, ink, ip, it, ock, oke, op, ore, ot, uck, ug, ump, unk.* See <http://www.enchantedlearning.com/rhymes/wordfamilies/>



## GLOSSARY OF SPECIAL EDUCATION TERMS

**Accommodations.** Changes in the administration of an assessment, such as setting, scheduling, timing, presentation format, response mode, or others, including any combination of these that does not change the construct intended to be measured by the assessment or the meaning of the resulting scores. Accommodations are used for equity, not advantage, and serve to level the playing field. To be appropriate, assessment accommodations must be identified in the student's Individualized Education Plan (IEP) or Section 504 plan and used regularly during instruction and classroom assessment.

**Achievement descriptors.** Narrative descriptions of performance levels that convey student performance at each achievement level and further defines content standards by connecting them to information that describes how well students are doing in learning the knowledge and skills contained in the content standards. See also "performance descriptors."

**Achievement levels.** A measurement that distinguishes an adequate performance from a novice or expert performance. Achievement levels provide a determination of the extent to which a student has met the content standards. See also "performance levels."

**Achievement standard.** A system that includes performance levels (e.g., unsatisfactory, proficient, or advanced), descriptions of student performance for each level, examples of student work representing the entire range of performance for each level, and cut scores. A system of performance standards operationalizes and further defines content standards by connecting them to information that describes how well students are doing in learning the knowledge and skills contained in the content standards. See also "performance standards."

**Achievement test.** An instrument designed to measure efficiently the amount of academic knowledge and/or skill a student has acquired from instruction. Such tests provide information that can be compared to either a norm group or a measure of performance, such as a standard.

**Age appropriate.** The characteristics of the skills taught, the activities and materials selected, and the language level employed that reflect the chronological age of the student.

**Alignment.** The similarity or match between or among content standards, achievement (performance) standards, curriculum, instruction, and assessments in terms of equal breadth, depth, and complexity of knowledge and skill expectations.

**Alternate assessment.** An instrument used in gathering information on the standards-based performance and progress of students whose disabilities preclude their valid and reliable participation in general assessments. Alternate assessments measure the performance of a relatively small population of students who are unable to participate in the general assessment system, even with accommodations, as determined by the IEP team.

**Assessment.** The process of collecting information about individuals, groups, or systems that relies upon a number of instruments, one of which may be a test, making assessment a more comprehensive term than *test*.

**Assessment literacy.** The knowledge of the basic principles of sound assessment practice including terminology, development, administration, analysis, and standards of quality.

**Assistance.** (versus support) The degree to which the teacher provides aid to the student's performance that provides direct assistance in the content or skill being demonstrated by the student. That is, the assistance involves the teacher performing the cognitive work required. Assistance results in an invalidation of the item or score. See also "support."

**Assistive technology.** A device, piece of equipment, product system or service that is used to increase, maintain, or improve the functional capabilities of a student with a disability. (See 34 CFR §300.5 and 300.6.)

**Cues.** Assistance, words, or actions provided to a student to increase the likelihood that the student will give the desired response.

**Curriculum.** A document that describes what teachers do in order to convey grade-level knowledge and skills to a student.

**Depth.** The level of cognitive processing (e.g., recognition, recall, problem solving, analysis, synthesis, and evaluation) required for success relative to the performance standards.

**Disaggregation.** The collection and reporting of student achievement results by particular subgroups (e.g., students with disabilities, limited English proficient students), to ascertain the subgroup's academic progress. Disaggregation makes it possible to compare subgroups or cohorts.

**Essence of the Standard.** Is that which conveys the same ideas, skills, and content of the standard, expressed in simpler terms.

**Essential Elements (EEs or CCEEs).** The Common Core Essential Elements are specific statements of the content and skills that are linked to the Common Core State Standards (CCSS) grade level specific expectations for students with significant cognitive disabilities.

**Grade Band Essential Element.** A statement of essential precursor content and skills linked to the Common Core State Standards (CCSS) grade-level standards and indicators that maintain the essence of that standard, thereby identifying the grade-level expectations for students with significant cognitive disabilities to access and make progress in the general curriculum.

**Grade level.** The grade in which a student is enrolled.

**Individualized Education Program (IEP).** An IEP is a written plan, developed by a team of regular and special educators, parents, related service personnel and the student, as appropriate, describing the specially designed instruction needed for an eligible exceptional student to progress in the content standards and objectives and to meet other educational needs.

**Linked.** A relationship between a grade-level indicator for Common Core State Standards (CCSS) and Common Core Essential Elements (EEs or CCEEs) that reflects similar content and skills but does not match the breadth, depth, and complexity of the standards.

**Multiple measures.** Measurement of student or school performance through more than one form or test

- For students, these might include teacher observations, performance assessments, or portfolios.
- For schools, these might include dropout rates, absenteeism, college attendance, or documented behavior problems.

**Natural cue.** Assistance given to a student that provides a flow among the expectations presented by the educator, opportunities to learn, and the desired outcome exhibited by the student.

**Opportunity to learn.** The provision of learning conditions, including suitable adjustments, to maximize a student's chances of attaining the desired learning outcomes, such as the mastery of content standards.

**Readability.** The formatting of presented material that considers the organization of text; syntactic complexity of sentences; use of abstractions; density of concepts; sequence and organization of ideas; page format; sentence length; paragraph length; variety of punctuation; student background knowledge or interest; and use of illustrations or graphics in determining the appropriate level of difficulty of instructional or assessment materials.

**Real-world application.** The opportunity for a student to exhibit a behavior or complete a task that he or she would normally be expected to perform outside of the school environment.

**Response requirements.** The type, kind, or method of action required of a student to answer a question or testing item. The response may include, but is not limited to, reading, writing, speaking, creating, and drawing.

**Stakeholders.** A group of individuals perceived to be vested in a particular decision (e.g., a policy decision).

**Standardized.** An established procedure that assures that a test is administered with the same directions, under the same conditions, and is scored in the same manner for all students to ensure the comparability of scores. Standardization allows reliable and valid comparison to be

made among students taking the test. The two major types of standardized tests are norm-referenced and criterion-referenced.

**Standards.** There are two types of standards, content, and achievement (performance).

- **Content standards.** Statements of the subject-specific knowledge and skills that schools are expected to teach students, indicating what students should know and be able to do.
- **Achievement (Performance) standards.** Indices of qualities that specify how adept or competent a student demonstration must be and that consist of the following four components:
  - levels that provide descriptive labels or narratives for student performance (i.e., advanced, Level III, etc.);
  - descriptions of what students at each particular level must demonstrate relative to the task;
  - examples of student work at each level illustrating the range of performance within each level; and
  - cut scores clearly separating each performance level.

**Standards-based assessments.** Assessments constructed to measure how well students have mastered specific content standards or skills.

**Test.** A measuring device or procedure. Educational tests are typically composed of questions or tasks designed to elicit predetermined behavioral responses or to measure specific academic content standards.

**Test presentation.** The method, manner, or structure in which test items or assessments are administered to the student.

**Universal design of assessment.** A method for developing an assessment to ensure accessibility by all students regardless of ability or disability. Universal design of assessment is based on principles used in the field of architecture in which user diversity is considered during the conceptual stage of development.

*\*Adapted from the Glossary of Assessment Terms and Acronyms Used in Assessing Special Education Students: A Report from the Assessing Special Education Students (ASES) State Collaborative on Assessment and Student Standards (SCASS.)*

## BIBLIOGRAPHY OF DEVELOPMENT PROCESS

- Bradford, S., Shippen, M., Alberto, P., Houchins, D., & Flores, M. (2006). Using systematic instruction to teach decoding skills to middle school students with moderate intellectual disabilities. *Education and Training in Developmental Disabilities, 41*(4), 333-343. Retrieved from [http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?\\_nfpb=true&\\_ERICExtSearch\\_SearchValue\\_0=EJ754222&ERICExtSearch\\_SearchType\\_0=no&accno=EJ754222](http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=EJ754222&ERICExtSearch_SearchType_0=no&accno=EJ754222)
- Browder, D., Wakeman, S., Spooner, F., Ahlgrim-Delzell, L., & Algozzine, B. (2006). Research on reading instruction for individuals with significant cognitive disabilities. *Exceptional Children, 72*, 392-408. Retrieved from [http://findarticles.com/p/articles/mi\\_hb3130/is\\_4\\_72/ai\\_n29277754/](http://findarticles.com/p/articles/mi_hb3130/is_4_72/ai_n29277754/)
- Conners, F., Rosenquist, C., Sligh, A., Atwell, J., & Kiser, T. (2006). Phonological reading skills acquisition by children with mental retardation. *Research in Developmental Disabilities, 27*(2), 121-137. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15967636>.
- Council of Chief State School Officers (CCSSO). (2003). *Glossary of assessment terms and acronyms used in assessing special education students: A report from the Assessing Special Education Students (ASES) State Collaborative on Assessment and Student Standards (SCASS)*. Washington, DC: Author. Retrieved from [http://www.ccsso.org/Documents/2006/Assessing\\_Students\\_with\\_Disabilities\\_Glossary\\_2006.pdf](http://www.ccsso.org/Documents/2006/Assessing_Students_with_Disabilities_Glossary_2006.pdf)
- Education Commission of the States. (1998). *Designing and implementing standards-based accountability systems*. Denver, CO: Author. Retrieved from <http://www.eric.ed.gov/PDFS/ED419275.pdf>
- Erickson, K., & Clendon, S. (2009). Addressing literacy demands of the curriculum for beginning readers and writers. In G. Soto and C. Zangari (Eds.), *Practically Speaking: Language, Literacy, and Academic Development for Students with AAC Needs* (pp. 195-215). Baltimore, MD: Brookes. Retrieved from <http://www.brookespublishing.com/store/books/soto-69513/index.htm>
- Erickson, K., Musselwhite, C., & Ziolkowski, R. (2002). The beginning literacy framework. Volo, IL: Don Johnston, Inc. Retrieved from [http://www.donjohnston.com/research/beg\\_lit\\_framework.pdf](http://www.donjohnston.com/research/beg_lit_framework.pdf)
- Hansche, L. (1998). *Handbook for the development of performance standards: Meeting the requirements of Title I*. Washington, DC: U.S. Department of Education (ED) and CCSSO. Retrieved from <http://www.eric.ed.gov/PDFS/ED427027.pdf>

- Institute of Community Inclusion. (2012). Think college!, College options for people with intellectual disabilities [website]. Boston, MA: University of Massachusetts Boston. Retrieved from <http://www.thinkcollege.net/>
- Jaeger, R. M., & Tucker, C. G. (1998). *Analyzing, disaggregating, reporting, and interpreting students' achievement test results: A guide to practice for Title I and beyond*. Washington, DC: CCSSO.
- Johnstone, C. J. (2003). *Improving validity of large-scale tests: Universal design and student performance* (Technical Report 37). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes (NCEO). Retrieved from <http://www.cehd.umn.edu/nceo/onlinepubs/technical37.htm>
- Lehr, C., & Thurlow, M. (2003). *Putting it all together: Including students with disabilities in assessment and accountability systems* (Policy Directions No. 16). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/NCEO/onlinepubs/Policy16.htm>
- Linn, R. L., & Herman, J. L. (1997). *A policymaker's guide to standards-led assessment*. Denver, CO: National Center for Research on Evaluation, Standards, and Student Testing (CRESST) & Education Commission of the States (ECS) Distribution Center. Retrieved from <http://www.eric.ed.gov/PDFS/ED408680.pdf>
- Quenemoen, R., Thompson, S., & Thurlow, M. (2003). *Measuring academic achievement of students with significant cognitive disabilities: Building understanding of alternate assessment scoring criteria* (Synthesis Report 50). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/NCEO/onlinepubs/Synthesis50.html>
- Rabinowitz, S., Roeber, E., Schroeder, C., & Sheinker, J. (2006). *Creating aligned standards and assessment systems*. Washington, DC: CCSSO. Retrieved from [http://www.ccsso.org/Documents/2006/Creating\\_Aligned\\_Standards\\_2006.pdf](http://www.ccsso.org/Documents/2006/Creating_Aligned_Standards_2006.pdf)
- Rehfeldt, R., Kinney, E., Root, S., & Stromer, R. (2009). Creating activity schedules using Microsoft Powerpoint. *Journal of Applied Behavior Analysis*, 37(1), 115-128. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1284488/>
- Roeber, E. (2002). *Setting standards on alternate assessments* (Synthesis Report 42). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/nceo/OnlinePubs/Synthesis42.html>
- Sheinker, J. M. (2004, April 26). *Achievement standards for alternate assessments: What is standard setting?* Teleconference presentation for the National Center for Educational Outcomes to 38 State Departments of Education, Minneapolis, MN. Retrieved from <http://www.cehd.umn.edu/nceo/teleconferences/tele08/default.html>

- Sheinker, J. M., & Redfield, D. L. (2001). *Handbook for professional development on assessment literacy*. Washington, DC: CCSSO.
- TASH. (n.d.) *TASH advocates for full membership, relationships, participation and learning for all students with disabilities within inclusive general education classes*. Washington, DC: Author. Retrieved from <http://tash.org/advocacy-issues/inclusive-education/>
- Thompson, S. J., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large scale assessments* (Synthesis Report 44). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/nceo/onlinepubs/Synthesis44.html>
- University of Washington. (2010). *It's Your Career: Work-Based Learning Opportunities for College Students With Disabilities*. Seattle, WA: Author. Retrieved from <http://www.washington.edu/doi/Brochures/Careers/worklearn.html>
- Ysseldyke, J., Krentz, J., Elliott, J., Thurlow, M. L., Erickson, R., & Moore, M. L. (1998). *NCEO framework For educational accountability*. Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/NCEO/onlinepubs/archive/Framework/FrameworkText.html>

**APPENDIX A**

**SEA/Stakeholder Demographics**



Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Peggy Akins	IA	Master Educator License:K-8 Mental Disabilities Mild/Moderate;5-12 Mental Disabilities Mild/Moderate	Special Educator on Special Assignment	K-12	Mild/Moderate, Behavior, Autism, Severe/Profound, LD	Caucasian	16-20	MS
Emilie Amundson	WI	English Language Arts	General Education State Consultant	General Education 6-12	Diverse, Special Education, and English Language Learner students	Caucasian	6-10	MA
Debra Asano	MI	K-8: English Language Arts, Speech, and Mathematics	General Education, RESA Curriculum Consultant, Regional Literacy Trainer for MLPP, DIBELS, REWARDS, Michigan Foundations in Reading	General Education Classroom K, 1, 3, 7, 8; Title I Instruction K-5	Title I Instructor K-5, Elementary Building Administrator, District/RESA Assessment Coordinator	Caucasian	26-30	MA
Robert Bartlett	WV	Master's Degree in Severe Multiple Disabilities, Certification in Autism, Multi-Categorical Certification, including Learning Disabilities, Behavioral Disabilities, and Mental Impairments	Director of Special Education and School Improvement, RESA 6 (Regional Education Service Agencies), Wheeling, WV	K-6 Autism and MI (All Special Education)	15 years in high school classroom for students with Severe/Profound Disabilities and 9+ years in K-6 classroom for students with Autism and Mental Impairments, 23 years working summer program with all grade levels, including Pre-K through High School.	Caucasian	21-25	MA
Maria Beck	VA	Special Education	Special Education Instructional Specialist for Students with Severe Disabilities	Special Education K-12	20 years teaching this population and 7 years administrative experience with alternate assessment	Caucasian	26-30	MS

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Brenda Berrios	NJ	Teacher of the Handicapped, Elementary Education	Special Education	N/A	Cognitively Impaired (Mild - Severe), Autism Spectrum Disorders	Puerto Rican	30+	MA
Daniel Biegun	VA	No Response	Intellectual Disability Specialist (Training and Technical Assistance Center, Old Dominion University)	High School	3 years educational specialist, 12 years teacher of students with multiple and intellectual disabilities (high school)	Caucasian	11-15	MS
Annalisa Brewster	WA	K-12 Special Education, K-8 General Education	4-5 Self-Contained Special Education	Previously taught K-5 Special Education	Severe to profound delays, multiple disabilities, dual-sensory loss (deaf-blind)	Caucasian	6-10	MED
James Brey	UT	Bachelor of Science in Elementary Education Grades 1-8 and Special Education Mild to Moderate K-12, Master in Education with an Endorsement in Severe Disabilities K-12	Temporary Assignment (Teacher on Special Assignment) - Elementary Special Education Severe Teacher	Secondary Severe Special Education Grades 7-9, Secondary Mild to Moderate Special Education 7-9, Elementary Special Education Severe K-5 (2 different schools) Adult Basic Education (ABE) Continuing ED at Dixie State College (Post-Post high 22 years to very old.)	Mild to Moderate Special Education Severe to Profound Special Education	Caucasian	16-20	MED
Jennifer Burnes	OK	Special Education; All Content Areas	Assessment Coordinator, Special Education Services, State Department of Education	6-8; Early Childhood Special Education	Severe/Profound; Mild-Moderate	Caucasian	6-10	MED & MS

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Kristen Burton	WI	N/A	DPI-Assessment	N/A	EBD, Alternate Assessment development	Caucasian	1-5	BS
Debby Byrne	KS	English 7-9; Social Studies 7-9; Elementary K-9; Educable Mentally Retarded; Trainable Mentally Retarded	Lifeskills Coordinator for Olathe District Schools K-21	Special Education throughout my whole career.	Coordinator for the Olathe School District. Special Pops and Special Olympics liaison for the city of Olathe and the school district	Caucasian	26-30 yrs.	MS
Wendy Carver	UT	Communication Disorders (K-12+) and Special Education (K-12+); Endorsements: Speech-Language Pathology, Psychology, Mild/Moderate Disabilities, English	Special Education Assessment Specialist	Special Education every grade: K-post high school	Mild/moderate and severe	Caucasian	30+	MS
Beth Cipoletti	WV	Math 7-12	SEA Assistant Director, Office of Assessment and Accountability	Math 7-12 and College	Inclusion Classes	Caucasian	30+	EdD
Kim Cook	WA	K-12 Special Education; K-12 English as a Second Language; K-12 Bilingual Education; K-8 Elementary Education	K-5 Literacy Coach	General Education Kindergarten; Special Education Kindergarten; Special Education Preschool; Dual Language Kindergarten	ELL; Low SES; Bilingual; Migrant	Caucasian	11-15	MED
Pam Cox	OK	Reading, Math, Elementary Education, Special Education	Instructional Coach	Preschool-12, Special Education	Teacher of ID, AU, TBI, OHI, SLD	Caucasian	21-25	BS

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Dianna Daubenspeck	OK	Multiple Handicapped PK- 12, Other Health Impaired, Learning Disabilities, reading	Special Services Curriculum Specialist PK- 12th grades	PK- 12	Multiple Disabilities, Learning Disabilities, Traumatic Brain Injury, OHI	Caucasian	30+	MED
Amy Daugherty	OK	Severe/Profound Special Education, All Content Areas	Associate State Director, Special Education Services, State Dept. of Education	K-12	S/P; Emotional Disturbance	Caucasian	6-10	BS
Thomas Deeter	IA	N/A	Lead Consultant (General Education) Assessment, Accountability, Program Evaluation	General Education		Asian-Caucasian	21-25	PhD
Holly Draper	KS	Functional Special Education and Adaptive Special Education	Grades 6-10 Functional Special Education	Age 5-21 Functional Special Education (in Missouri)	Teaching SPED for 6 years, paraeducator 1 year, group home worker 2 years	Caucasian	6-10	BS

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Jeffrey Dunn	WA	English, Communications, Social Studies	Secondary Learning Assistance Program (LAP, WA companion program to Title 1) Coordinator; English teacher 9-12 (Blended general/special education class); one concurrent enrollment Eastern Washington University English 101 class.	General Education English grades 9-12	Developed and implemented district secondary reading, writing, and math RTI screening and diagnostic assessment process; coordinate after school and summer school programs open to targeted special education students; taught and supported reading and writing special education students in their effort to meet state standards.	Caucasian	30+	PhD
John Eisenberg	VA	Special Education	Director of Instructional Support and Related Services, Virginia Department of Education	Special Education	ASD; SD; ID	Caucasian	11-15	MS
Lin Everett	MO	K-8 Teaching; Lifetime Certificate; K-5 Educational ADMIN/Principal; 4-8 Middle school ADMIN/Principal, 4-8 Social Studies; Superintendent's Certification K-12	Assistant Director of Assessment/Office of CCR, MO Department of Education	Self-contained 1-4; ELA Middle (2/3 self-contained); Principal K-8; Methods for pre-service teachers/university	Special Education Coordinator	Caucasian	30+	EdS
Kurt Farnsworth	UT	Elementary K-6	Elementary English Language Arts Assessment Specialist	Grades 4th, 5th, Principal	Principal, 4th grade inclusion classroom	Caucasian	11-15	MED

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Melia Franklin	MO	English-7-12	General Education-English 1, Applied Communications I and II, 7th grade Reading, College Prep English	All grades 6-12 (English and German) at some point in my career	Class within a Class dual instructor, Frequently teach mainstreamed students	Caucasian	16-20	EdD
Thomai Gersh	MI	MI Teacher Certification K-8 Natural and Social Sciences; Licensed Psychologist; Administrative Approval	Administrator: Supervisor of Special Education	N/A	Early On (Evaluator and Coordinator); Severely Multiply Impaired; Severely Cognitively Impaired	Caucasian	30+	EdS
Melissa Gholson	WV	Multi-Subjects K-8; Mental Impairments, Specific LD and Autism K-21; Behavior Disorders K-21 Principal and Superintendent; Curriculum Supervisor	West Virginia Department of Education, Office of Assessment and Accountability, Alternate Assessment and Accommodations	Elementary (general and special education), Middle School (special education); High School (general and special education), , College (teacher preparation courses)	Supervisor of Special Education; Special education teaching experience with autism, mild, moderate, severe and profound, mental impairments, behavior disorders, gifted and learning disabilities	Caucasian	16-20	MA
Claire Greer	NC	K-12 Special Education, 1-8 General Education	State Consultant	Elementary, Middle, and High School	Mild, moderate and severe disabilities	Caucasian	21-25	MS
Dawn Gresham	KS	Music K-12, Educable Mental Retarded K-12, Functional Special Education PreK-12	Special Education	High School, grades 9 to age 21.	Severe emotional disturbances, students with Autism Spectrum disorders and students with Severe Multiple Disabilities.	Caucasian	11-15	MS

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Judy Hamer	IA	K-6 Elementary Teacher, K-8 Reading, 5-8 Reading, K-12 Reading Specialist	8th Grade Language Arts (General Education) and District K-12 Language Arts Head Teacher	Co-teaches with special educator in these language arts classes	Students with disabilities integrated into general education classroom; coteaching and consultation with special education teachers	Caucasian	21-25	MS
Angela Harris	WV	K - 8: Multi-Subjects; K - 12: Mentally Impaired - Mild - Moderate, Specific Learning Disabilities, Behavior Disorders, Autism; PK-Adult: Superintendent, Supervisor of Instruction, Principal, and School Library / Media	Special Education Evaluator (Placed 2010 - 2011 School Year)	High School: Special Education 9 - 12; Elementary: General and Special Education K - 6; and Middle School: Special Education 7 - 9	Autism Training, Positive Behavior Support Training, Board Maker Training, and Data Analysis for Special Education	Caucasian	16-20	MA
Gerald Hartley	WV	Elementary Education 1-9 , Art K-10, English 5-8, Middle Childhood Certification	Reading/Language Arts 8th Grade	Grades 4-12	Special Education	Caucasian	30+	MA
Emma Hatfield-Sidden	NC	No response	Special Education ID-Mod		3 years in ID-Mod Classroom	Caucasian	1-5	BA
Linda Hickey	KS	Special Education (5 endorsements), Elementary Education	Special Education-- Student Services Consultant	Elementary through High School	30+ years of experience	Caucasian	30+	MS
Janice Hill	UT	General Special Education K-12 with Severe Endorsement	Special Education K-6 Self Contained Classroom	Special Education 7-9	Students with Severe Multiple Cognitive Impairments, Autism	Caucasian	16-20	BS

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Lori Hillyer	WI	Secondary Education: Language Arts; Secondary Education: French; Reading Specialist: K-12	Learning Coordinator	6-8 General Education	Diverse population (Approx. 60% minority, predominantly AA and ELL); 55% poverty	Caucasian	26-30	MS
Louann Hoover	MO	No response	Special Education for Students with Severe Disabilities	K-6 Special Education	Severely Disabled	Caucasian	30+	BS
Debbie Jameson	MO	Elementary Education 1-5 Lifetime Certification; Middle School Certification 5-8 Literacy; Reading Certification	Literacy Coach/Title 1 Teacher for grades 1, 3, 4	Classroom Teacher for grades 1, 2, 3, 5; Reading Recovery/Title 1 Teacher for grades K-5	STARR Teacher, MAP Senior Leader, Literacy Coach, Title 1 District Chair for Hannibal Public Schools, Reading Recovery Trained, MAP Scorer/Item Writer/Table Leader, Model Curriculum Writer, State Literacy Team, GLE/MAP Alignment Study, Graduate Professor Part Time, Depth of Knowledge (DOK) Alignment Study to MAP Questions/GLE	Caucasian	26-30	MED



Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Judy Jennings	NC	LD, MR, BEH-K-6, MR Extended Curriculum K-12	Special Education Teacher- Self-Contained Centralized Class for 6-8th Grade Students with Moderate to Severe Autism and EC Chairperson	Have taught 3rd-5th grade inclusion special education and self-contained special education Have taught inclusion 7th grade ELA and Math- Special Education BED Self-Contained 6th-8th grade - Special Education	Volunteered pre-k developmentally delayed class 1 year TA developmentally delayed classroom 2 summers, Nanny for family with 16 year old daughter who was severely multiply disabled for 1 year, Teacher Assistant in a self-contained AU 9-14 year olds, Worked at a camp for 5-21 year olds with cognitive delays, Special Olympics coach for Cycling and Alpine Skiing over 10 years, mother of Liz-12 year daughter with Autism diagnosis and cognitive delays, Volunteered summer to work with 3rd-5th grade students on AAC needs.	Caucasian	16-20	MED
Al Klugh	VA	No response	Special Education Administration	Special Education Teacher/Building Principal	Autism, ID, Population Previously known as Severe Disability, ED	Caucasian	26-30	MED
Judy Kraft	WA	No response	Alternate Assessment Specialist for WA State			Caucasian		MS

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Kathleen Kvamme-Promes	IA	Master Educator License K-12 Mental Disabilities Moderate/Severe/ Profound. K-12 Instructional Strategist Mental Disabilities	Special Education Severe/Profound (Significant Disabilities) 5-12	Special Education year 13-14	Autism, Physical Disabilities, Behavior, Severe/Profound, Medically Fragile	Caucasian	21-25	EdS
Sondra LeGrande	OK	Special Education Teacher -Mild and Moderate/Severe, English, Social Studies	Special Education teacher at Edmond Santa Fe High School	Special education 6-12	ID, Autism, Multiple disabilities, other health impaired, hearing impaired, visual impairment	Caucasian	16-20	BS
Deborah Matthews	KS	Students w/Severe Cognitive Disabilities (functional) and Early Childhood	Kansas State Department of Education	Early Childhood-High School Special Education	Mild, moderate and severe students with disabilities	Caucasian	21-25	MS
Tamara Maxwell	WI	Reading Specialist, English, and Political Science	Instructional Coach for Secondary Education Content Area Teachers and English Teacher (general)	N/A	Working with special education, at-risk, and regular secondary education students who struggle with reading, writing, and motivation	Caucasian	6-10	MS
Jennifer Michalenok	NC	Mild-Moderate Disabilities, K-12; Moderate-Severe Disabilities, K-12; Reading Certification	Elementary Special Education, Multiple Disabilities classroom	Elementary: K-5 grade levels	Specialization in Low-Incidence Disabilities	European American	1-5	MED

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Marcia O'Brien	MI	Elementary K- 8, Cognitive Impairments, Learning Disabilities.	Special Education, Principal (building ages 2-26 years old)	Special Education – High School, General Education K-1	Cognitive Impairments, Emotional Impairments, Learning Disabilities, Severe Multiple Impairments, Autism, Traumatic Brain Injury	Caucasian	26-30	EdS
Melanie O'Dea	NJ	Special Education	NJ Department of Education/Office of Special Education Programs	N/A	Students with significant intellectual disabilities	Caucasian	26-30	MS
Kimberley Perisho	WA	Elementary Curriculum/Alternative Assessment	Special Education, Mariner High School Life Skills, grades 9-12	Occasional student ages 18-21(Special Education), 4 yrs.; Music K-12, 10 yrs.; Nursery school (General Education)	3 yrs. Paraeducator ( 1 year 1-on-1 and 2 years life skills); 5 yrs. Life Skills teacher	Caucasian	16-20	MA
Connie Persike	WI	Speech Pathologist	–Student Services Coordinator	Early Childhood and Elementary Special Education	Autism, special education	Caucasian	11-15	MS

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Terri Portice	MI	Learning Disabilities K-12 (SM) K-12; Emotional Impairment (SE) K-12; Cognitive Impairment (SA) K-12; Elementary K-5 all subjects; K-8 All subjects Self Contained Classroom; Central Office Administration; Special Education Supervisor Approval, teacher consultant approval	Director of Teaching and Learning at Kent Intermediate School District (Educational Service Center Agency) - Professional Development and Curriculum Development K-12 General and Special Education Collaboration	Team Taught K-5 SPED in gen ed classroom; K-5 self-contained SPED pull out services. For the last 4 yrs, I've been leading curriculum & professional development related to the 4 core content areas for all levels K-12. During this time I've spent a great deal of time in direct support with secondary ELA teachers. Recent work has been with K-12 staff in the areas of ELA and Math as it relates to making the transition from state content expectations to the CCSS.	Learning Disabilities; Emotional Impairment, and Cognitive Impairment Classroom	Caucasian	16-20 years	MA 2 masters
Cheryl Ann Prevatte	VA	Math/Reading/ Science/Social Studies	Special Education Teacher K-5 (Intellectually Disabled/Self-Contained)	K-5	Special Education Teacher Rockingham County, Virginia - 29 years Previous experience w/TARC	Caucasian	26-30	BS
Sarah Reives	NC	Math 9-12 and Science 9-12	North Carolina Department of Instruction	General Education 9-12	Assessment	African American	6-10	MED

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Katie Sadler	MO	ECSE, BD/MR K-12	K-5/Self-contained AU	ECSE	MU, ECSE, AU	Caucasian	6-10	BS
Angela See	WV	Elementary Education, Content for Special Education, English, and History, Multi-Categorical - CBD, LD, MI, K-6, OS AD	Special Education 9-12	Other experience - worked on the development of the WV alternate assessment, development of the WV Extended Academic Content Standards and Performance Descriptors, Acuity items for Extended Standards, Scored Alternate Assessment	BD, LD, MI, Autism	Caucasian	6-10	MA
Donna Shaw	IA	K-12 Special Education; General/Special Education Administrator	Special Education	No Response	32 years experience	Caucasian	30+	MED
Kris Shaw	KS	Reading Specialist, Master's Degree	KSDE Language Arts and Literacy Consultant	N/A	N/A	Caucasian	26-30	MS
Linda Stalliviere	UT	Elementary Education 1-8	LEA Mentor Coordinator (New Teacher Mentor for K-12 General and Special Education	2nd, 4th General Education	Special education students within my classroom USEAP (Utah Special Education Advisory Panel) committee, general education representative	Caucasian	30+	BA

Name	State	Area of Certification	Current Assignment	Other Grades Taught	Special Population Experience	Ethnicity	Years of Experience	Highest Degree
Christie Stephenson	OK	Mild/Moderate Disabilities, Severe/Profound Disabilities	Special Education Supervisor	K-12	I have taught in classrooms with student populations consisting of LD, ID, Multi-disabled, Autistic and OHI students.	Caucasian	6-10	BS
Emily Thatcher	IA	K-12 Strat I MD; K-12 Strat II MD. Multi-categorical 6-12; BD K-6; Severe and Profound K-12; Special Education Consultant	Iowa Department of Education, Bureau of Student and Family Support Services (SPED) Instructional Content Resource Consultant and Alternate Assessment Consultant	Special Education and Art K-12	22 years varied experience	Caucasian	21-25	MED
Janice Tornow	WA	All areas including special education	Office of Superintendent of Public Instruction	Special Education K-12	5 year Special Ed Teacher and 26 years Special Education Administrator	Caucasian	30+	MED
Jane VanDeZande	MO	ELA and Special Education (handicapped learner)	Director of Assessment	5-8 (Speech and Language, handicapped learner-LD); 9-12 ELA and Social Studies 9-12	Chapter I Director math and reading	Irish American	16-20	Other Degree
Sara Vold	WI	No response	Special Education Cognitive Disabilities Teacher K-5	Special Education Cognitive Disabilities Teacher K-6	Autism, CD (mild and severe), EBD	Caucasian	1-5	BS
Ryan Webb	UT	English Language Arts, Spanish	8th grade Tier 2 ELA classroom, 8th and 9th grade Spanish 1 and 2	General Education	Tier 2 Language Arts Students	Caucasian	6-10	MED

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Neal Webster	NJ	Literacy Specialist	General Education and Special Populations	High School, and provide PD to K-8th grade teachers in Classroom instructional processes (IDEAL and LEADS)	As it applies to inclusion of all special populations during literacy block.	Multi Ethnic (African American, Native American and Caucasian)	11-15	MA
Joanne Winkelman	MI	Elementary and Special Education	State Agency	Middle and High School	20 years Special Education experience	Caucasian	20-25	PhD
Adam Wyse	MI	State Education Agency Assessment Participant	Psychometrician for Alternate Assessments	Grades 9-12 Mathematics	Taught SLD, EI, Speech and Language, and Hearing Impaired Students	Caucasian		PhD
Tina Yurcho	NJ	No response	Special Education Supervisor	Special Education	infant through middle school. Multiply disabled population	Caucasian	26-30	MED

# Common Core Essential Elements for Mathematics

From the State Members of the

Dynamic Learning Maps  
Alternate Assessment Consortium  
and  
Edvantia, Inc.

March 7, 2012



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# Common Core Essential Elements and for Mathematics

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## APPENDIX A: SEA/STAKEHOLDER DEMOGRAPHICS

## **ACKNOWLEDGEMENTS**

\*For stakeholder demographics, See Appendix A.

### **Edvantia Facilitators**

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### **Dynamic Learning Maps (DLM) Consortia States**

Iowa  
Kansas  
Michigan  
Mississippi  
Missouri  
New Jersey  
North Carolina  
Oklahoma  
Utah  
Virginia  
Washington  
West Virginia  
Wisconsin

## **Mathematics State Education Agency (SEA)/Stakeholder Representatives**

### **IOWA**

**SEA Representatives:** Tom Deeter, Emily Thatcher

**Stakeholders:** Barbara Adams, John Butz, Laurel Cakinberk, Dagny Fidler

### **KANSAS**

**SEA Representatives:** Sidney Cooley, Debbie Matthews

**Stakeholders:** DiRae Boyd, Teresa Kraft, Michele Luksa, Mona Tjaden

### **MICHIGAN**

**SEA Representatives:** Linda Howley, Joanne Winkelman

**Stakeholders:** Tamara Barrientos, Roula AlMouabbi, Brian Pianosi, Larry Timm

### **MISSOURI**

**SEA Representatives:** Lin Everett, Sara King, Jane VanDeZande

**Stakeholders:** Sharon Campione, Emily Combs, Karen Pace

### **NEW JERSEY**

**SEA Representatives:** Shirley Cooper, MaryAnn Joseph

**Stakeholders:** Sue Burger, Tracey Lank, Katie Slane

### **NORTH CAROLINA**

**SEA Representative:** Robin Barbour

**Stakeholders:** Ronda Layman, Janet Sockwell

### **OKLAHOMA**

**SEA Representatives:** Jennifer Burnes, Amy Daugherty

**Stakeholder:** Christie Stephenson

### **UTAH**

**SEA Representatives:** Wendy Carver, Jennie DeFriez

**Stakeholders:** Lynda Brown, Kim Fratto, Lisa Seipert, Nicole Warren

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## INTRODUCTION

The Common Core Essential Elements (EEs) are linked to the Common Core State Standards (CCSS) for Mathematics. A group of general educators, special educators, and content specialists from member states in the Dynamic Learning Maps (DLM) Consortium gathered to determine the essence of the CCSS. The stakeholder group members were selected by their states to participate in this work. State education agency (SEA) representatives and SEA-selected teachers collaborated to develop the EEs.

This document provides a high-level view of the relationship between the CCSS and the links to performance for students with significant cognitive disabilities. It is intended to provide a beginning structure for the design of a summative alternate assessment. The document is not intended as a stand-alone guide to instruction, nor is it intended to contain all the steps in a complete learning progression or detailed curriculum. The DLM and associated professional development will provide greater detail than described in this document.

Beginning with the Mathematics CCSS, stakeholders defined links to illuminate the precursors for the essential content and skills contained in the grade level CCSS clusters and indicators. These EEs are not intended as a redefinition of the standards. Rather, they are intended to describe challenging expectations for students with significant cognitive disabilities in relation to the CCSS. The EEs clarify the bridge between grade level achievement expectations for students with significant cognitive disabilities who participate in alternate assessments and the CCSS.

Neither are the EEs intended to prescribe the beginning or end of instruction on the content and skills they represent; rather, they indicate the grade level at which initial mastery would be the target to be assessed. Students should begin instruction in content and skills at the earliest point possible and continue instruction until mastery is attained.

The stakeholder group also developed instructional achievement level descriptors (IALDs) for each of the EEs for four performance levels: I, II, III, and IV. For each IALD, the stakeholder group developed examples to illustrate how students might demonstrate achievement of the performance level across the broad range of students with significant cognitive disabilities. Both the IALDs and accompanying examples are available in a companion document available from the DLM Consortium.

Finally, the stakeholder group developed alternate assessment achievement descriptors for each grade level -- from third grade through high school -- where summative assessments might be required. The alternate assessment achievement descriptors will provide a bridge between the EEs and a summative alternate assessment aligned to them. The descriptors are intended to provide one element to guide development of the test blueprint, development of items and tasks that measure the full range of achievement, and the setting of cut scores during standard setting for the assessment. The focus of an alternate assessment in a standards-based system is based on the achievement that aligns with EEs linked to grade level content.



Together, the system of standards and descriptors is designed to allow students with significant cognitive disabilities to progress toward the achievement of state standards linked to grade level expectations. The relationship of standards and assessment to teaching and learning are depicted for use by teachers, assessment designers, and users of alternate assessment results.

## **NCLB GUIDANCE**

The stakeholder group's work was guided by the U. S. Department of Education's Peer Review Guidance (*Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001 [NCLB]*), which requires that alternate academic achievement standards align with the alternate assessment. They must

- include knowledge and skills that link to grade level expectations,
- promote access to the general curriculum, and
- reflect professional judgment of the highest learning standards possible for the group of students with the most significant cognitive disabilities.

Although the grade-level content may be reduced in complexity or adjusted to reflect prerequisite skills, the link to grade-level standards must be clear. The Peer Review Guidance notes that the concept of alternate achievement standards related to grade level may be ambiguous. According to the Guidance, the descriptors

- should be defined in a way that supports individual growth because of their linkage to different content across grades;
- are not likely to show the same clearly defined advances in cognitive complexity as the general education standards when examined across grade levels;
- should rely on the judgment of experienced special educators and administrators, higher education representatives, and parents of students with disabilities as they define alternate achievement standards; and
- should provide an appropriate challenge for students with the most significant cognitive disabilities as they move through their schooling.

The Guidance requires links to grade-level standards. The EEs were developed by DLM consortium states to differentiate knowledge and skills by grade level. This differentiation is intended to clarify the link between the grade-level EEs and the grade-level CCSS and to show a forward progression across grades. The progression of content and skills across years of instruction reflect the changing priorities for instruction and learning as students move from grade to grade. The differences from grade level to grade level are often subtle and progression is sometimes

more horizontal than vertical. For example, the grade-to-grade level differences may consist of added skills that are not of obvious increasing rigor compared to the differences found in the CCSS across grade levels. To the degree possible, skills escalate in complexity or rigor at Levels III and IV across the grades, with clear links to the shifting emphasis at each grade level in the CCSS.

## **ACCESS TO INSTRUCTION AND ASSESSMENT**

The EEs and Achievement Descriptors developed by the DLM consortium states are intended to create the maximum possible access to the CCSS for students with significant cognitive disabilities. The way in which information is presented for instruction and assessment and the manner in which students demonstrate achievement is in no way intended to be limited by statements of EEs or Achievement Descriptors. To that end, modes of communication, both for presentation or response, are not stated in either the EEs or Achievement Descriptors unless a specific mode is an expectation. Where no limitation has been stated, no limitation should be inferred. Students' opportunities to learn and to demonstrate learning should be maximized by providing whatever communication, assistive technologies, augmentative and alternative communication (AAC) devices, or other access tools that are necessary and routinely used by the student during instruction.

Students with significant cognitive disabilities include a broad range of students with diverse disabilities and communication needs. For some students with significant cognitive disabilities, graphic organizers similar to those used by students without disabilities provide useful access to content and are adequate to maximize opportunities to learn and demonstrate achievement. Other students require a range of assistive technologies to access content and demonstrate achievement. For some students, AAC devices and accommodations for hearing and visual impairments will be needed. As with other physical disabilities, students with visual impairments may perform some expectations using modified items, presentations, or response formats. A few items may not lend themselves to such modifications. Decisions about the appropriate modifications for visual impairments are accounted for in the design of the assessments.

The access challenge for some is compounded by the presence of multiple disabilities. All of these needs, as well as the impact of levels of alertness due to medication and other physical disabilities which may affect opportunities to respond appropriately, need to be considered.

Most presentation and response access conditions do not constitute accommodations as they are understood for students who take the general assessment. Methods of presentation that do not violate the intended construct by aiding or directing the students' response allow the student to perceive what knowledge or skill is expected. Aids to responding that do not constitute a violation of the intended construct allow the student to demonstrate the expected knowledge and skills. Examples of acceptable access technologies include the following:

- communication devices that compensate for a students' physical inability to produce independent speech.
- devices that compensate for a students' physical inability to manipulate objects or materials, point to responses, turn pages in a book, or use a pencil or keyboard to answer questions or produce writing.
- tools that maximize a students' ability to acquire knowledge and skills and to demonstrate the products of their learning.

## **ACCESSING THE GENERAL CURRICULUM**

Technology is also of particular importance to students with significant cognitive disabilities to access the general curriculum and achieve the EEs. Although educators have traditionally viewed technology as hardware and software, assistive technology tenets provide a broader view of the applications of low, medium, and high levels of technology use. Assistive technology tools can be vital to a student in acquiring and demonstrating learning unimpeded by the barriers that the disability presents.

Many students with significant cognitive disabilities have difficulty with or cannot use speech to communicate and/or are supported by the use of communication symbols (e.g., communication boards, speech generating devices, voice output communication devices) and supports to augment their speech and other means of communication. Students who require symbols and other AAC supports require frequent modeling in the use of those symbols to interact and respond during instruction. Students who use symbols and other communication supports need as much modeling as children who use speech to communicate. Modeling in this way is not viewed as a means of prompting, guidance, or support, just as having a teacher talk serves those purposes for a student who communicates using speech.

When modeling the use of symbols and other communication supports, teachers use the symbols and supports themselves, hand them to students without communication impairments to use, and involve the students who need to use them every day. Each of these steps can play an important role in validating the use of symbols and communication supports and demonstrating multiple levels of expertise in their use.

## **GUIDANCE AND SUPPORT**

The authors of the CCSS use the words, "prompting and support" at the earliest grade levels to indicate when students were not expected to achieve standards completely independently. Generally, "prompting" refers to "the action of saying something to persuade, encourage, or remind someone to do or say something" (McKean, 2005). However, in special education, prompting is often used to mean a system of structured cues to elicit desired behaviors that otherwise would not occur. In order to communicate clearly that teacher assistance is permitted during instruction of the EEs, and is not limited to structured prompting

procedures, the decision was made by the stakeholder group to use the more general term *guidance* throughout the EEs.

Guidance and support during instruction should be interpreted as teacher encouragement, general assistance, and informative feedback to support the student in learning. Some examples of the kinds of teacher behaviors that would be considered guidance and support include

- getting the student started (e.g., “Tell me what to do first”),
- providing a hint in the right direction without revealing the answer (e.g., Student wants to write dog but is unsure how, the teacher might say, “See if you can write the first letter in the word, /d/og.”),
- narrowing the field of choices as a student provides an inaccurate response,
- using structured technologies such as task specific word banks, or
- providing the structured cues such as those found in prompting procedures (e.g., least-to-most prompts, simultaneous prompting, and graduated guidance).

Guidance and support as described above apply to instruction. Alternate assessments measure the degree to which students with significant cognitive disabilities have mastered the EEs. During any assessment, accommodation(s) allowed on the assessment must have been used and practiced during instruction; however, some accommodations that are permissible during instruction would compromise the integrity of the assessments, thereby yielding invalid and unreliable results and cannot be used for assessment purposes. Some guidance and support strategies may not be allowed for assessment purposes when variance in teacher assistance, cues, and prompts could compromise judgments about mastery of the EEs and comparability of administration.

## **RELATIONSHIP TO THE DYNAMIC LEARNING MAPS ASSESSMENT**

The EEs and Achievement Descriptors developed by the DLM consortium states and their stakeholder representatives provide teachers with information about the level of knowledge and skills expected of their students Assessment Achievement Level Descriptors (AALDs) will emerge as drafts. The AALDs are content and grade specific, but summarize across the EEs the key performance differences across levels of achievement and across grade levels. While draft AALDs will be used in the initial stages of standard setting to help guide that process, final AALDs will emerge from the standard setting process. Standard setting will take into account the overall degree of accuracy with which a student would need to perform in order to achieve at a particular level. Just as on a general education assessment, no individual student will be expected to perform proficiently on every EE in order to be considered Level III. (See Levels of Performance described below.)

For purposes of the DLM assessments under development, the achievement descriptors provide a useful link between the EEs and the DLM assessments. The descriptors, along with DLM developed from the CCSS, provide guidance to the development of the alternate

assessment so that a full range of performance is measured and the setting of score ranges within each level rests on a defined frame of reference. The grade level EEs and alternate achievement standards

- standardize meaning for the content and skill expectations,
- create consistency in expected performance,
- emphasize skill similarities for all students participating in the alternate assessments,
- accommodate diverse disabilities, and
- ground alternate assessments in a consistent set of expectations.

Achievement descriptors are used to categorize and explain student performance both in the course of instruction and on the alternate assessment.

## **SYSTEM ALIGNMENT**

The EEs are intended to contribute to a fully aligned system of standards, curriculum, teaching, learning, technology, and assessment that optimize equity of opportunity for all students in each classroom, school, and local education agency to access and learn the standards. To the degree possible, the grade level EEs are vertically aligned and linked to the grade level CCSS.

The linkages provided by the EEs to the CCSS are intended to increase access to the general curriculum for all students with disabilities. Just as the EEs are designed to define achievement in academic content areas linked to the CCSS, the EEs reframe the expectations for foundational skills in pre-academic and academic areas. Precursor/prerequisite and the unique enabling skills related to mathematics content is specified in the context of their roles as a foundation for students with significant cognitive disabilities to achieve skills related to academic content.

### **Levels of Performance**

Within this document, each grade level EE is cross-referenced to one or several CCSS.

Four performance levels have been proposed for the DLM's alternate academic achievement standards: I, II, III, and IV. Mastery is considered to be demonstrated at Level III and Level IV and is identified as meeting the Level III level on an alternate assessment as specified in the NCLB. A general description of each of these levels is included below:

**Level I** - A student at this level attempts to perform tasks with support.

**Level II** - A student at this level demonstrates some content knowledge and skills from the EEs linked to grade level standards.

**Level III** - A student at this level demonstrates content knowledge and skills at a level aligned with the complexity of the EEs.

**Level IV** - A student at this level demonstrates content knowledge and skills at a higher level of complexity than those described for Level III. Typically, this complexity includes the routine use of symbol systems as applied to mathematics.

For each performance level, specific descriptions of content and skills are bulleted and examples of each level of performance are provided. The EEs are intended as a resource for developing individualized education plan (IEP) goals, benchmarks, and curricular materials in reading, language arts, and mathematics. Students may need goals and benchmarks in areas other than academic content domains (e.g., self-care/living skills, mobility). As always, IEPs address the individual needs of each student to make progress toward the standards.

## DOCUMENT ORGANIZATION

**Common Core Grade-Level Clusters** are the Cluster titles and Grade-Level Indicators as they appear in the CCSS for Mathematics (Common Core State Standards Initiative, 2010).

**Common Core Essential Elements (EEs)** describe links to the CCSS for access by students with significant cognitive disabilities.

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Represent and solve problems involving addition and subtraction.</b></p> <p><b>1.OA.1.</b> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE1.OA.1.a.</b> Use language to describe putting together and taking apart, aspects of addition and subtraction.</p>

### Directions for Interpreting Essential Elements

**Essential Elements (EEs).** The EEs are statements that provide links for students with significant cognitive disabilities to the essential content and skills defined in the grade-level clusters of the CCSS. The EEs provide a bridge for students with significant cognitive disabilities to the CCSS. The EEs are not intended as a reinterpretation of the CCSS; rather, they were developed to create a bridge between the CCSS and challenging achievement expectations for students with significant cognitive disabilities. The order in which the EEs are listed is a direct reflection of the order in which the CCSS are listed. The order is not intended to convey a sequence for instruction; rather, it illustrates progress across years. In the tables, the left column contains the CCSS grade-level clusters and indicators and the right column contains the EE linked to them.. Each EE completes the phrase “Students will . . . .”

CCSS marked with an (+) are advanced standards and are not included in this document as it was determined by the stakeholder group that students of this population would not be accessing the curriculum at this advanced level and writing Essential Elements to this level would be unnecessary. Also, if it appears that a standard has been omitted in the high school grades, it is an advanced standard.

“Begins in grade \_\_\_” is utilized when the expectations for students to begin to demonstrate mastery is found at a higher grade level. Planning for instruction should incorporate instruction related to the higher grade level EE and begin at the earliest possible point for each student. Students with significant cognitive disabilities may require several years of instruction prior to the point at which they may be expected to begin to demonstrate mastery of a concept.





## COMMON CORE ESSENTIAL ELEMENTS FOR KINDERGARTEN

### Kindergarten Mathematics Standards: Counting and Cardinality

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Know number names and the count sequence.</b></p> <p><b>K.CC.1.</b> Count to 100 by ones and by tens.</p>	<p><b>EEK.CC.1.</b> Starting with one, count to 10 by ones.</p>
<p><b>K.CC.2.</b> Count forward beginning from a given number within the known sequence (instead of having to begin at one).</p>	<p><b>EEK.CC.2.</b> N/A</p>
<p><b>K.CC.3.</b> Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).</p>	<p><b>EEK.CC.3.</b> N/A</p>
<p><b>Count to tell the number of objects.</b></p> <p><b>K.CC.4.</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p>When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p> <p>Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>Understand that each successive number name refers to a quantity that is one larger.</p>	<p><b>EEK.CC.4.</b> Demonstrate one-to-one correspondence pairing each object with one and only one number and each name with only one object.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>K.CC.5.</b> Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p>	<p><b>EEK.CC.5.</b> Count out up to three objects from a larger set, pairing each object with one and only one number name to tell how many.</p>
<p><b>Compare numbers.</b></p> <p><b>K.CC.6.</b> Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.</p>	<p><b>EEK.CC.6.</b> Identify whether the number of objects in one group is more or less than (when the quantities are clearly different) or equal to the number of objects in another group.</p>
<p><b>KK.CC.7.</b> Compare two numbers between 1 and 10 presented as written numerals.</p>	<p><b>EEK.CC.7.</b> N/A</p>

### Kindergarten Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</b></p> <p><b>K.OA.1.</b> Represent addition and subtraction with objects, fingers, mental images, drawings<sup>1</sup>, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p>	<p><b>EEK.OA.1.</b> Represent addition as “putting together” or subtraction as “taking from” in everyday activities.</p>
<p><b>K.OA.2.</b> Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p>	<p><b>EEK.OA.2.</b> N/A</p>
<p><b>K.OA.3.</b> Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition by a drawing or equation (e.g., <math>5 = 2 + 3</math> and <math>5 = 4 + 1</math>).</p>	<p><b>EEK.OA.3.</b> N/A</p>
<p><b>K.OA.4.</b> For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p>	<p><b>EEK.OA.4.</b> N/A</p>
<p><b>K.OA.5.</b> Fluently add and subtract within 5.</p>	<p><b>EEK.OA.5.</b> N/A</p>

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<sup>1</sup> Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

**Kindergarten Mathematics Standards: Number and Operations in Base Ten**

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<p><b>Work with numbers 11-19 to gain foundations for place value.</b></p> <p><b>K.NBT.1.</b> Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as <math>18 = 10 + 8</math>); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>	<p><b>EEK.NBT.1.</b> N/A (See EEK.NBT.1.4 and EEK.NBT.1.6)</p>

**Kindergarten Mathematics Standards: Measurement and Data**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Describe and compare measurable attributes.</b></p> <p><b>K.MD.1.</b> Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p><b>K.MD.2.</b> Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p> <p><b>Classify objects and count the number of objects in each category.</b></p> <p><b>K.MD.3.</b> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<sup>2</sup></p>	<p><b>EEK.MD.1-3.</b> Classify objects according to attributes (big/small, heavy/light).</p>

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<sup>2</sup> Limit category counts to be less than or equal to 10.

**Kindergarten Mathematics Standards: Geometry**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</b></p> <p><b>K.G.1.</b> Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p>	<p><b>EEK.G.1.</b> Identify words of proximity to describe the relative position.</p>
<p><b>K.G.2.</b> Correctly name shapes regardless of their orientations or overall size.</p> <p><b>K.G.3.</b> Identify shapes as two-dimensional (lying in a plane, “flat”; or three-dimensional, “solid”).</p>	<p><b>EEK.G.2-3.</b> Match two-dimensional shapes (circle, square, triangle).</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR FIRST-GRADE

### First Grade Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Represent and solve problems involving addition and subtraction.</b></p> <p><b>1.OA.1.</b> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE1.OA.1.a.</b> Use language to describe putting together and taking apart, aspects of addition and subtraction.</p>
	<p><b>EE1.OA.1.b.</b> Recognize two groups that have the same or equal quantity.</p>
<p><b>1.OA.2.</b> Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE1.OA.2.</b> Use “putting together” to solve problems with two sets.</p>
<p><b>Understand and apply properties of operations and the relationship between addition and subtraction.</b></p> <p><b>1.OA.3.</b> Apply properties of operations as strategies to add and subtract.<sup>3</sup> <i>Examples: If <math>8 + 3 = 11</math> is known, then <math>3 + 8 = 11</math> is also</i></p>	<p><b>EE1.OA.3.</b> N/A</p>

<sup>3</sup> Students need not use formal terms for these properties.

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>known. (Commutative property of addition.) To add <math>2 + 6 + 4</math>, the second two numbers can be added to make a 10, so <math>2 + 6 + 4 = 2 + 10 = 12</math>. (Associative property of addition.)</i></p>	
<p><b>1.OA.4.</b> Understand subtraction as an unknown-addend problem. <i>For example, subtract <math>10 - 8</math> by finding the number that makes 10 when added to 8. Add and subtract within 20.</i></p>	<p><b>EE1.OA.4.</b> N/A (See EENBT.1.4 and EENBT.1.6)</p>
<p><b>Add and subtract within 20.</b></p> <p><b>1.OA.5.</b> Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p>	<p><b>EE1.OA.5.a.</b> Use manipulatives or visual representations to indicate the number that results when adding one more.</p>
	<p><b>EE1.OA.5.b.</b> Apply knowledge of “one less” to subtract one from the numbers.</p>
<p><b>1.OA.6.</b> Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., <math>8 + 6 = 8 + 2 + 4 = 10 + 4 = 14</math>); decomposing a number leading to a ten (e.g., <math>13 - 4 = 13 - 3 - 1 = 10 - 1 = 9</math>); using the relationship between addition and subtraction (e.g., knowing that <math>8 + 4 = 12</math>, one knows <math>12 - 8 = 4</math>); and creating equivalent but easier or known sums (e.g., adding <math>6 + 7</math> by creating the known equivalent <math>6 + 6 + 1 = 12 + 1 = 13</math>).</p>	<p><b>EE1.OA.6.</b> N/A</p>
<p><b>Work with addition and subtraction equations.</b></p> <p><b>1.OA.7.</b> Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? <math>6 = 6</math>, <math>7 = 8 - 1</math>, <math>5 + 2 = 2 + 5</math>, <math>4 + 1 = 5 + 2</math>.</p>	<p><b>EE1.OA.7.</b> N/A (See EE1.OA.1.b)</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>1.OA.8.</b> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations <math>8 + ? = 11</math>, <math>5 = \_ - 3</math>, <math>6 + 6 = \_</math>.</i></p>	<p><b>EE1.OA.8.</b> N/A</p>

**First Grade Mathematics Standards: Number and Operations in Base Ten**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Extend the counting sequence.</b></p> <p><b>1.NBT.1.</b> Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p>	<p><b>EE1.NBT.1.a.</b> Count by ones.</p>
	<p><b>EE1.NBT.1.b.</b> Count as many as 10 objects and represent the quantity with the corresponding numeral.</p>
<p><b>Understand place value.</b></p> <p><b>1.NBT.2.</b> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <ul style="list-style-type: none"> <li>▪ 10 can be thought of as a bundle of ten ones — called a “ten.”</li> <li>▪ The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</li> <li>▪ The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</li> </ul>	<p><b>EE1.NBT.2.</b> Create sets of 10.</p>
<p><b>1.NBT.3.</b> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p>	<p><b>EE1.NBT.3.</b> Compare two groups of 10 or fewer items when the quantity of items in each group is similar.</p>
<p><b>Use place value understanding and properties of operations to</b></p>	<p><b>EE1.NBT.4.</b> Compose numbers less than or equal to five in more</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>add and subtract.</b></p> <p><b>1.NBT.4.</b> Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p>	<p>than one way.</p>
<p><b>1.NBT.5.</b> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p>	<p><b>EE1.NBT.5.</b> N/A (See EE1.OA.5.a and EE1.OA.5.b)</p>
<p><b>1.NBT.6.</b> Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>	<p><b>EE1.NBT.6.</b> Decompose numbers less than or equal to five in more than one way.</p>

**First Grade Mathematics Standards: Measurement and Data**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Measure lengths indirectly and by iterating length units.</b></p> <p><b>1.MD.1.</b> Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p><b>1.MD.2.</b> Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p>	<p><b>EE1.MD.1-2.</b> Use appropriate vocabulary to describe the length of an object using the language of longer/shorter, taller/shorter.</p>
<p><b>Tell and write time.</b></p> <p><b>1.MD.3.</b> Tell and write time in hours and half-hours using analog and digital clocks.</p>	<p><b>EE1.MD.3.a.</b> Demonstrate an understanding of the terms “tomorrow, yesterday, and today.”</p>
	<p><b>EE1.MD.3.b.</b> Name a day of the week for tomorrow and yesterday.</p>
	<p><b>EE1.MD.3.c.</b> Identify activities that come next, before, and after.</p>
	<p><b>EE1.MD.3.d.</b> Demonstrate an understanding that telling time is the same every day.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Represent and interpret data.</b></p> <p><b>1.MD.4.</b> Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p>	<p><b>EE1.MD.4.</b> Given a count of the total number of data points in two categories, determine whether there are more or less in each category.</p>

### First Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Reason with shapes and their attributes.</b></p> <p><b>1.G.1.</b> Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p><b>1.G.2.</b> Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.<sup>4</sup></p>	<p><b>EE1.G.1.</b> Identify common two-dimensional shapes: square, circle, triangle, and rectangle.</p>
<p><b>1.G.3.</b> Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as <i>two of</i>, or <i>four of</i> the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>	<p><b>EE1.G.3.</b> Put together two pieces to make a shape that relates to the whole (i.e., two semicircles to make a circle, two squares to make a rectangle).</p>

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<sup>4</sup> Students do not need to learn formal names such as “right rectangular prism.”

## COMMON CORE ESSENTIAL ELEMENTS FOR SECOND GRADE

### Second Grade Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Represent and solve problems involving addition and subtraction.</b></p> <p><b>2.OA.1.</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE2.OA.1.</b> Add and subtract to solve real world one-step story problems from 0-20 when the result is unknown.</p>
<p><b>Add and subtract within 20.</b></p> <p><b>2.OA.2.</b> Fluently add and subtract within 20 using mental strategies.<sup>5</sup> By end of Grade 2, know from memory all sums of two one-digit numbers.</p>	<p><b>EE2.OA.2.</b> N/A (See EE2.NBT.7)</p>
<p><b>Work with equal groups of objects to gain foundations for multiplication.</b></p> <p><b>2.OA.3.</b> Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even</p>	<p><b>EE2.OA.3.</b> Equally distribute even numbers of objects between two groups.</p>

<sup>5</sup> See standard 1.OA.6 for a list of mental strategies.

CCSS Grade-Level Clusters	Common Core Essential Elements
number as a sum of two equal addends.	
<b>2.OA.4.</b> Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<b>EE2.OA.4.</b> Use addition to find the total number of objects arranged within equal groups up to a total of 10.



## Second Grade Mathematics: Number and Operations in Base Ten

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand place value.</b></p> <p><b>2.NBT.1.</b> Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <ul style="list-style-type: none"> <li>▪ 100 can be thought of as a bundle of ten tens — called a “hundred.”</li> <li>▪ The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</li> </ul>	<p><b>EE2.NBT.1.</b> Represent numbers through 30 with sets of tens and ones with objects in columns or arrays.</p>
<p><b>2.NBT.2.</b> Count within 1000; skip-count by 5s, 10s, and 100s.</p>	<p><b>EE2.NBT.2.a.</b> Count from 1 to 30 (count with meaning; cardinality).</p>
	<p><b>EE2.NBT.2.b.</b> Name the next number in a sequence between 1 and 10.</p>
<p><b>2.NBT.3.</b> Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p>	<p><b>EE2.NBT.3.</b> Identify number symbols 1 to 30.</p>
<p><b>2.NBT.4.</b> Compare two, three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p>	<p><b>EE2.NBT.4.</b> Compare sets of objects and numbers using appropriate vocabulary (more, less, equal).</p>
<p><b>Use place value understanding and properties of operations to add and subtract.</b></p>	<p><b>EE2.NBT.5.a.</b> Identify the meaning of the “+” sign (i.e., combine, plus, add), and the “=” sign (equal).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>2.NBT.5.</b> Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	
	<p><b>EE2.NBT.5.b.</b> Using concrete examples, compose and decompose numbers up to 10 in more than one way.</p>
<p><b>2.NBT.6.</b> Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p><b>2.NBT.7.</b> Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p>	<p><b>EE2.NBT.6-7.</b> Use objects, representations, and numbers (0-20) to add and subtract.</p>
<p><b>2.NBT.8.</b> Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p><b>2.NBT.9.</b> Explain why addition and subtraction strategies work, using place value and the properties of operations.<sup>6</sup></p>	<p><b>EE2.NBT.8-9.</b> N/A</p>

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<sup>6</sup> Explanations may be supported by drawings or objects.

## Second Grade Mathematics: Measurement and Data

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Measure and estimate lengths in standard units.</b></p> <p><b>2.MD.1.</b> Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p><b>2.MD.2.</b> Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p>	<p><b>EE2.MD.1.</b> Measure the length of objects using non-standard units.</p>
<p><b>2.MD.3.</b> Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p><b>2.MD.4.</b> Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p>	<p><b>EE2.MD.3-4.</b> Order by length using non-standard units.</p>
<p><b>Relate addition and subtraction to length.</b></p> <p><b>2.MD.5.</b> Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE2.MD.5.</b> Increase or decrease length by adding or subtracting unit(s).</p>
<p><b>2.MD.6.</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, . . . , and represent whole-number sums and differences within 100 on a number line diagram.</p>	<p><b>EE2.MD.6.</b> Use a number line to add one more unit of length.</p>
<p><b>Work with time and money.</b></p>	<p><b>EE2.MD.7.</b> Indicate the digit that tells the hour on a digital clock.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>2.MD.7.</b> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>	
<p><b>2.MD.8.</b> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>	<p><b>EE2.MD.8.</b> Recognize that money has value.</p>
<p><b>Represent and interpret data.</b></p> <p><b>2.MD.9.</b> Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p><b>2.MD.10.</b> Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.</p>	<p><b>EE2.MD.9-10.</b> Create picture graphs from collected measurement data.</p>

**Second Grade Mathematics Standards: Geometry**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Reason with shapes and their attributes.</b></p> <p><b>2.G.1.</b> Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.<sup>7</sup> Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p>	<p><b>EE2.G.1.</b> Describe attributes of two-dimensional shapes.</p>
<p><b>2.G.2.</b> Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p>	<p><b>EE2.G.2.</b> N/A</p>
<p><b>2.G.3.</b> Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>	<p><b>EE2.G.3.</b> N/A</p>

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<sup>7</sup> Sizes are compared directly or visually, not compared by measuring.

## COMMON CORE ESSENTIAL ELEMENTS FOR THIRD GRADE

### Third Grade Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Represent and solve problems involving multiplication and division.</b></p> <p><b>3.OA.1.</b> Interpret products of whole numbers, e.g., interpret <math>5 \times 7</math> as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as <math>5 \times 7</math>.</i></p> <p><b>3.OA.2.</b> Interpret whole-number quotients of whole numbers, e.g., interpret <math>56 \div 8</math> as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as <math>56 \div 8</math>.</i></p>	<p><b>EE3.OA.1-2.</b> Use repeated addition and equal groups to find the total number of objects to find the sum.</p>
<p><b>3.OA.3.</b> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>EE3.OA.3.</b> See EE3.OA.1. for repeated addition, a foundational skill for multiplication and division. (Multiplication begins in grade 4 and division begins in grade 5).</p>
<p><b>3.OA.4.</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations <math>8 \times ? = 48</math>, <math>5 = \_ \div 3</math>, <math>6 \times 6 = ?</math></i></p>	<p><b>EE3.OA.4.</b> Solve addition and subtraction problems when result is unknown with number 0-30.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand properties of multiplication and the relationship between multiplication and division.</b></p> <p><b>3.OA.5.</b> Apply properties of operations as strategies to multiply and divide.<sup>8</sup> <i>Examples: If <math>6 \times 4 = 24</math> is known, then <math>4 \times 6 = 24</math> is also known. (Commutative property of multiplication.) <math>3 \times 5 \times 2</math> can be found by <math>3 \times 5 = 15</math>, then <math>15 \times 2 = 30</math>, or by <math>5 \times 2 = 10</math>, then <math>3 \times 10 = 30</math>. (Associative property of multiplication.) Knowing that <math>8 \times 5 = 40</math> and <math>8 \times 2 = 16</math>, one can find <math>8 \times 7</math> as <math>8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56</math>. (Distributive property.)</i></p>	<p><b>EE3.OA.5.</b> N/A (Multiplication begins at grade 4).</p>
<p><b>3.OA.6.</b> Understand division as an unknown-factor problem. <i>For example, find <math>32 \div 8</math> by finding the number that makes 32 when multiplied by 8.</i></p>	<p><b>EE3.OA.6.</b> N/A (Division begins at grade 5).</p>
<p><b>Multiply and divide within 100.</b></p> <p><b>3.OA.7.</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p>	<p><b>EE3.OA.7.</b> N/A (Multiplication begins grade 4 and division begins in grade 5).</p>
<p><b>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</b></p>	<p><b>EE3.OA.8.</b> Add to solve real world one-step story problems from 0-30.</p>

<sup>8</sup> Students need not use formal terms for these properties.

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>3.OA.8.</b> Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.<sup>9</sup></p>	
<p><b>3.OA.9.</b> Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p>	<p><b>EE3.OA.9.</b> Identify arithmetic patterns.</p>

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<sup>9</sup> This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order.



### Third Grade Mathematics Standards: Number and Operations in Base Ten

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Use place value understanding and properties of operations to perform multi-digit arithmetic.</b><sup>10</sup></p> <p><b>3.NBT.1.</b> Use place value understanding to round whole numbers to the nearest 10 or 100.</p>	<p><b>EE3.NBT.1.</b> Identify the two 10s a number comes in between on a number line (numbers 0-30).</p>
<p><b>3.NBT.2.</b> Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p><b>EE3.NBT.2.</b> Identify place value to tens.</p>
<p><b>3.NBT.3.</b> Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</p>	<p><b>EE3.NBT.3.</b> Count by tens using money.</p>

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<sup>10</sup> A range of algorithms may be used.

**Third Grade Mathematics Standards: Number and Operations--Fractions<sup>11</sup>**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Develop understanding of fractions as numbers.</b></p> <p><b>3.NF.1.</b> Understand a fraction <math>1/b</math> as the quantity formed by 1 part when <math>a</math> whole is partitioned into <math>b</math> equal parts; understand a fraction <math>a/b</math> as the quantity formed by <math>a</math> parts of size <math>1/b</math>.</p> <p><b>3.NF.2.</b> Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <ul style="list-style-type: none"> <li>▪ Represent a fraction <math>1/b</math> on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into <math>b</math> equal parts. Recognize that each part has size <math>1/b</math> and that the endpoint of the part based at 0 locates the number <math>1/b</math> on the number line.</li> <li>▪ Represent a fraction <math>a/b</math> on a number line diagram by marking off a lengths <math>1/b</math> from 0. Recognize that the resulting interval has size <math>a/b</math> and that its endpoint locates the number <math>a/b</math> on the number line.</li> </ul> <p><b>3.NF.3.</b> Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p> <ul style="list-style-type: none"> <li>▪ Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</li> </ul>	<p><b>EE3.NF.1-3.</b> Differentiate a fractional part from a whole.</p>

<sup>11</sup> Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, 8.

CCSS Grade-Level Clusters	Common Core Essential Elements
<ul style="list-style-type: none"> <li>▪ Recognize and generate simple equivalent fractions, (e.g., <math>1/2 = 2/4</math>, <math>4/6 = 2/3</math>). Explain why the fractions are equivalent, e.g., by using a visual fraction model.</li> <li>▪ Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form <math>3 = 3/1</math>; recognize that <math>6/1 = 6</math>; locate <math>4/4</math> and 1 at the same point of a number line diagram.</i></li> <li>▪ Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual fraction model.</li> </ul>	

### Third Grade Mathematics Standards: Measurement and Data

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</b></p> <p><b>3.MD.1.</b> Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p>	<p><b>EE3.MD.1.</b> Tell time to the hour on a digital clock.</p>
<p><b>3.MD.2.</b> Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).<sup>12</sup> Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.<sup>13</sup></p>	<p><b>EE3.MD.2.</b> Identify standard units of measure for mass and liquid.</p>
<p><b>Represent and interpret data.</b></p> <p><b>3.MD.3.</b> Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p>	<p><b>EE3.MD.3.</b> Use picture or bar graph data to answer questions about data.</p>
<p><b>3.MD.4.</b> Generate measurement data by measuring lengths using</p>	<p><b>EE3.MD.4.</b> Measure length of objects using standard tools, such</p>

<sup>12</sup> Excludes compound units such as cm<sup>3</sup> and finding the geometric volume of a container.

<sup>13</sup> Excludes multiplicative comparison problems (problems involving notions of “times as much”).

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.</p>	<p>as rulers, yardsticks, and meter sticks.</p>
<p><b>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</b></p> <p><b>3.MD.5.</b> Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <ul style="list-style-type: none"> <li>▪ A square with side length of 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.</li> <li>▪ A plane figure, which can be covered without gaps or overlaps by <math>n</math> unit squares, is said to have an area of <math>n</math> square units.</li> </ul> <p><b>3.MD.6.</b> Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p><b>3.MD.7.</b> Relate area to the operations of multiplication and addition.</p> <ul style="list-style-type: none"> <li>▪ Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</li> <li>▪ Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.</li> <li>▪ Use tiling to show in a concrete case that the area of a</li> </ul>	<p><b>EE3.MD.5-7.</b> N/A (Area begins at grade 6).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>rectangle with whole-number side lengths <math>a</math> and <math>b + c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning.</p> <ul style="list-style-type: none"> <li>▪ Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.</li> </ul>	
<p><b>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</b></p> <p><b>3.MD.8.</b> Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>	<p><b>EE3.MD.8.</b> N/A (Perimeter begins at grade 7).</p>

### Third Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Reason with shapes and their attributes.</b></p> <p><b>3.G.1.</b> Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p><b>EE3.G.1.</b> Recognize that shapes in different categories can share attributes.</p>
<p><b>3.G.2.</b> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.</i></p>	<p><b>EE3.G.2.</b> Recognize that shapes can be partitioned into equal areas.</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR FOURTH GRADE

### Fourth Grade Mathematics Standards: Operations and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Use the four operations with whole numbers to solve problems.</b></p> <p><b>4.OA.1.</b> Interpret a multiplication equation as a comparison, e.g., interpret <math>35 = 5 \times 7</math> as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p><b>4.OA.2.</b> Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p>	<p><b>EE4.OA.1-2.</b> Demonstrate the connection between repeated addition and multiplication.</p>
<p><b>4.OA.3.</b> Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>	<p><b>EE4.OA.3.</b> Solve one-step word problems using addition or subtraction.</p>
<p><b>Gain familiarity with factors and multiples.</b></p> <p><b>4.OA.4.</b> Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range</p>	<p><b>EE4.OA.4.</b> Show one way to arrive at product.</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
<p>1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p>	
<p><b>Generate and analyze patterns.</b></p> <p><b>4.OA.5.</b> Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i></p>	<p><b>EE4.OA.5.</b> Use repeating patterns to make predictions.</p>

**Fourth Grade Mathematics Standards: Numbers and Operations in Base Ten**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Generalize place value understanding for multi-digit whole numbers.</b></p> <p><b>4.NBT.1.</b> Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that <math>700 \div 70 = 10</math> by applying concepts of place value and division.</i></p>	<p><b>EE4.NBT.1.</b> Compare numbers to each other based on place value groups by composing and decomposing to 50.</p>
<p><b>4.NBT.2.</b> Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p>	<p><b>EE4.NBT.2.</b> Compare whole numbers (<math>&lt;</math>, <math>&gt;</math>, <math>=</math>).</p>
<p><b>4.NBT.3.</b> Use place value understanding to round multi-digit whole numbers to any place.</p>	<p><b>EE4.NBT.3.</b> Round one- and two-digit whole numbers from 0—50 to the nearest 10.</p>
<p><b>Use place value understanding and properties of operations to perform multi-digit arithmetic.</b></p> <p><b>4.NBT.4.</b> Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>	<p><b>EE4.NBT 4.</b> Add and subtract double-digit whole numbers.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>4.NBT.5.</b> Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p><b>EE4.NBT 5.</b> N/A (See EE. 4.OA.1.)</p>
<p><b>4.NBT.6.</b> Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p><b>EE4.NBT 6.</b> N/A</p>

**Fourth Grade Mathematics Standards: Number and Operations--Fractions<sup>14</sup>**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Extend understanding of fraction equivalence and ordering.</b></p> <p><b>4.NF.1.</b> Explain why a fraction <math>a/b</math> is equivalent to a fraction <math>(n \times a)/(n \times b)</math> by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p><b>4.NF.2.</b> Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as <math>1/2</math>. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual fraction model.</p>	<p><b>EE4.NF.1-2.</b> Understand <math>2/4 = 1/2</math>.</p>
<p><b>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</b></p> <p><b>4.NF.3.</b> Understand a fraction <math>a/b</math> with <math>a &gt; 1</math> as a sum of fractions <math>1/b</math>.</p> <ul style="list-style-type: none"> <li>▪ Understand addition and subtraction of fractions as joining</li> </ul>	<p><b>EE4.NF.3.</b> Differentiate between whole, half, and fourth.</p>

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<sup>14</sup> Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, 100.

<p>and separating parts referring to the same whole.</p> <ul style="list-style-type: none"> <li>▪ Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. <i>Examples: <math>3/8 = 1/8 + 1/8 + 1/8</math>; <math>3/8 = 1/8 + 2/8</math>; <math>2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>.</i></li> <li>▪ Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</li> <li>▪ Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.</li> </ul>	
<p><b>4.NF.4.</b> Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <ul style="list-style-type: none"> <li>▪ Understand a fraction <math>a/b</math> as a multiple of <math>1/b</math>. <i>For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>.</i></li> <li>▪ Understand a multiple of <math>a/b</math> as a multiple of <math>1/b</math>, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express <math>3 \times (2/5)</math> as <math>6 \times (1/5)</math>, recognizing this product as <math>6/5</math>. (In general, <math>n \times (a/b) = (n \times a)/b</math>.)</i></li> <li>▪ Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat <math>3/8</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does</i></li> </ul>	<p><b>EE4.NF.4.</b> N/A (See EE. 4.OA.1-2.)</p>

<i>your answer lie?</i>	
<p><b>Understand decimal notation for fractions, and compare decimal fractions.</b></p> <p><b>4.NF.5.</b> Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.<sup>15</sup> <i>For example, express <math>3/10</math> as <math>30/100</math>, and add <math>3/10 + 4/100 = 34/100</math>.</i></p> <p><b>4.NF.6.</b> Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite <math>0.62</math> as <math>62/100</math>; describe a length as <math>0.62</math> meters; locate <math>0.62</math> on a number line diagram.</i></p> <p><b>4.NF.7.</b> Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math>, and justify the conclusions, e.g., by using a visual model.</p>	<p><b>EE4.NF.5.</b> N/A (Decimals begin at grade 7).</p>

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<sup>15</sup> Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

**Fourth Grade Mathematics Standards: Measurement and Data**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</b></p> <p><b>4.MD.1.</b> Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), . . .</i></p>	<p><b>EE4.MD.1.</b> Identify the smaller measurement units that divide a larger unit within a measurement system.</p>
<p><b>4.MD.2.</b> Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>	<p><b>EE4.MD.2.a.</b> Tell time to the half hour using a digital or to the hour using an analog clock.</p>
	<p><b>EE4.MD.2.b.</b> Select the appropriate measurement tool from two related options to solve problems.</p>
	<p><b>EE4.MD.2.c.</b> Use standard measurement to compare lengths of objects.</p>
	<p><b>EE4.MD.2.d.</b> Identify objects that have volume.</p>
	<p><b>EE4.MD.2.e.</b> Identify coins (penny, nickel, dime, quarter) and</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
	their values.
<p><b>4.MD.3.</b> Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p>	<p><b>EE4.MD.3.</b> N/A (Area begins at 6th grade and perimeter begins at 7th grade).</p>
<p><b>Represent and interpret data.</b></p> <p><b>4.MD.4.</b> Make a line plot to display a data set of measurements in fractions of a unit (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i></p>	<p><b>EE4.MD.4.a.</b> Insert data into a preconstructed bar graph template.</p>
	<p><b>EE4.MD.4.b.</b> Interpret data from a variety of graphs to answer questions.</p>
<p><b>Geometric measurement: understand concepts of angle and measure angles.</b></p> <p><b>4.MD.5.</b> Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:</p> <ul style="list-style-type: none"> <li>▪ An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through <math>\frac{1}{360}</math> of a circle is called a “one-degree angle,” and can be used to</li> </ul>	<p><b>EE4.MD.5.</b> Recognize angles in geometric shapes.</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
measure angles. <ul style="list-style-type: none"> <li>▪ An angle that turns through <math>n</math> one-degree angles is said to have an angle measure of <math>n</math> degrees.</li> </ul>	
<b>4.MD.6.</b> Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	<b>EE4.MD.6.</b> Identify angles as larger and smaller.
<b>4.MD.7.</b> Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	<b>EE4.MD.7.</b> N/A (See EE4.MD.5.)

#### Fourth Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</b></p> <p><b>4.G.1.</b> Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p>	<p><b>EE4.G.1.</b> Distinguish between parallel and intersecting lines.</p>
<p><b>4.G.2.</b> Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.</p>	<p><b>EE4.G.2.</b> Distinguish between different attributes of shapes (lines, curves, angles).</p>
<p><b>4.G.3.</b> Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p>	<p><b>EE4.G.3.</b> Recognize a line of symmetry in a simple shape.</p>

## COMMON CORE ESSENTIAL ELEMENTS FOR FIFTH GRADE

### Fifth Grade Mathematics Standards: Operation and Algebraic Thinking

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Write and interpret numerical expressions.</b></p> <p><b>5.OA.1.</b> Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p><b>5.OA.2.</b> Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation “add 8 and 7, then multiply by 2” as <math>2 \times (8 + 7)</math>. Recognize that <math>3 \times (18932 + 921)</math> is three times as large as <math>18932 + 921</math>, without having to calculate the indicated sum or product.</i></p>	<p><b>EE5.OA.1-2.</b> N/A</p>
<p><b>Analyze patterns and relationships.</b></p> <p><b>5.OA.3.</b> Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the</p>	<p><b>EE5.OA.3.</b> Identify and extend numerical patterns.</p>

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<p>two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</p>	

**Fifth Grade Mathematics Standards: Number and Operations in Base Ten**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand the place value system.</b></p> <p><b>5.NBT.1.</b> Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p>	<p><b>EE5.NBT.1.</b> Compare numbers to each other based on place value groups by composing and decomposing to 99.</p>
<p><b>5.NBT.2.</b> Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p>	<p><b>EE5.NBT.2.</b> Recognize patterns in the number of zeros when multiplying a number by powers of 10.</p>
<p><b>5.NBT.3.</b> Read, write, and compare decimals to 1000ths.</p> <ul style="list-style-type: none"> <li>▪ Read and write decimals to 1000ths using base-ten numerals, number names, and expanded form, e.g., <math>347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)</math>.</li> <li>▪ Compare two decimals to 1000ths based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</li> </ul>	<p><b>EE5.NBT.3.</b> Round two-digit whole numbers to the nearest 10 from 0—90.</p>
<p><b>5.NBT.4.</b> Use place value understanding to round decimals to any place.</p>	<p><b>EE5.NBT.4.</b> Round money to a nearest dollar.</p>
<p><b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b></p> <p><b>5.NBT.5.</b> Fluently multiply multi-digit whole numbers using the standard algorithm.</p>	<p><b>EE5.NBT.5.</b> Multiply whole numbers up to <math>5 \times 5</math>.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>5.NBT.6.</b> Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p><b>5.NBT.7.</b> Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>	<p><b>EE5.NBT.6-7.</b> Illustrate the concept of division using fair and equal shares.</p>

**Fifth Grade Mathematics Standards: Number and Operations--Fractions**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Use equivalent fractions as a strategy to add and subtract fractions.</b></p> <p><b>5.NF.1.</b> Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, <math>2/3 + 5/4 = 8/12 + 15/12 = 23/12</math>. (In general, <math>a/b + c/d = (ad + bc)/bd</math>).</i></p>	<p><b>EE5.NF.1.</b> Differentiate between halves, fourths, and eighths.</p>
<p><b>5.NF.2.</b> Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result <math>2/5 + 1/2 = 3/7</math>, by observing that <math>3/7 &lt; 1/2</math>.</i></p>	<p><b>EE5.NF.2.</b> Solve two-step word problems using addition and subtraction of whole numbers.</p>
<p><b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b></p> <p><b>5.NF.3.</b> Interpret a fraction as division of the numerator by the denominator (<math>a/b = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret <math>3/4</math> as the result of dividing 3 by 4, noting that <math>3/4</math> multiplied by 4</i></p>	<p><b>EE5.NF.3.</b> N/A (See EE5.NF.1)</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size <math>\frac{3}{4}</math>. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p>	
<p><b>5.NF.4.</b> Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <ul style="list-style-type: none"> <li>▪ Interpret the product <math>(a/b) \times q</math> as a parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q \div b</math>. <i>For example, use a visual fraction model to show <math>(2/3) \times 4 = 8/3</math>, and create a story context for this equation. Do the same with <math>(2/3) \times (4/5) = 8/15</math>. (In general, <math>(a/b) \times (c/d) = ac/bd</math>.)</i></li> <li>▪ Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</li> </ul> <p><b>5.NF.5.</b> Interpret multiplication as scaling (resizing), by:</p> <ul style="list-style-type: none"> <li>▪ Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</li> <li>▪ Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given</li> </ul>	<p><b>EE5.NF.4-5.</b> N/A</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
<p>number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence <math>a/b = (n \times a)/(n \times b)</math> to the effect of multiplying <math>a/b</math> by 1.</p>	
<p><b>5.NF.6.</b> Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p><b>5.NF.7.</b> Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.<sup>16</sup></p> <ul style="list-style-type: none"> <li>▪ Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. <i>For example, create a story context for <math>(1/3) \div 4</math>, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that <math>(1/3) \div 4 = 1/12</math> because <math>(1/12) \times 4 = 1/3</math>.</i></li> <li>▪ Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for <math>4 \div (1/5)</math>, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that <math>4 \div (1/5) = 20</math> because <math>20 \times (1/5) = 4</math>.</i></li> </ul>	<p><b>EE5.NF. 6-7.</b> N/A</p>

<sup>16</sup> Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

CCSS Grade-Level Clusters	Common Core Essential Elements
<ul style="list-style-type: none"> <li>▪ Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share <math>\frac{1}{2}</math> lb of chocolate equally? How many <math>\frac{1}{3}</math>-cup servings are in 2 cups of raisins?</i></li> </ul>	

**Fifth Grade Mathematics Standards: Measurement and Data**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Convert like measurement units within a given measurement system.</b></p> <p><b>5.MD.1.</b> Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>	<p><b>EE5.MD.1.a.</b> Tell time using an analog or digital clock to the half or quarter hour.</p>
	<p><b>EE5.MD.1.b.</b> Use customary units to measure weight and length of objects.</p>
	<p><b>EE5.MD.1.c.</b> Indicate relative value of collections of coins.</p>
<p><b>Represent and interpret data.</b></p> <p><b>5.MD.2.</b> Make a line plot to display a data set of measurements in fractions of a unit (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i></p>	<p><b>EE5.MD.2.a.</b> Represent and interpret data on a picture, line plot, or bar graph given a model and a graph to complete.</p>
<p><b>Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.</b></p> <p><b>5.MD.3.</b> Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p>	<p><b>EE5.MD.3-5.</b> Determine volume of a cube by counting units of measure.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<ul style="list-style-type: none"> <li>▪ A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.</li> <li>▪ A solid figure, which can be packed without gaps or overlaps using <math>n</math> unit cubes, is said to have a volume of <math>n</math> cubic units.</li> </ul> <p><b>5.MD.4.</b> Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p><b>5.MD.5.</b> Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <ul style="list-style-type: none"> <li>▪ Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</li> <li>▪ Apply the formulas <math>V = l \times w \times h</math> and <math>V = b \times h</math> for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</li> <li>▪ Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</li> </ul>	

### Fifth Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Graph points on the coordinate plane to solve real-world and mathematical problems.</b></p> <p><b>5.G.1.</b> Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., <math>x</math>-axis and <math>x</math>-coordinate, <math>y</math>-axis and <math>y</math>-coordinate).</p> <p><b>5.G.2.</b> Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p> <p><b>5.G.3.</b> Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</p> <p><b>5.G.4.</b> Classify two-dimensional figures in a hierarchy based on properties.</p>	<p><b>EE5.G.1-5.</b> Sort two-dimensional figures and describe the common attributes such as angles, number of sides, corners (dimension), and color.</p>



## COMMON CORE ELEMENTS FOR SIXTH GRADE

### Sixth Grade Mathematics Standards: Ratios and Proportional Relationships

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand ratio concepts and use ratio reasoning to solve problems.</b></p> <p><b>6.RP.1.</b> Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</i></p> <p><b>6.RP.2.</b> Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, and use rate language in the context of a ratio relationship. <i>For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is <math>3/4</math> cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”<sup>17</sup></i></p> <p><b>6.RP.3.</b> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <ul style="list-style-type: none"> <li>▪ Make tables of equivalent ratios relating quantities with</li> </ul>	<p><b>EE6.RP.1.</b> Demonstrate a simple ratio relationship.</p>

<sup>17</sup> Expectations for unit rates in this grade are limited to non-complex fractions.

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <ul style="list-style-type: none"> <li>▪ Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i></li> <li>▪ Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</li> <li>▪ Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</li> </ul>	



**Sixth Grade Mathematics Standards: The Number System**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</b></p> <p><b>6.NS.1.</b> Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for <math>(2/3) \div (3/4)</math> and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that <math>(2/3) \div (3/4) = 8/9</math> because <math>3/4</math> of <math>8/9</math> is <math>2/3</math>. (In general, <math>(a/b) \div (c/d) = ad/bc</math>.) How much chocolate will each person get if 3 people share <math>1/2</math> lb. of chocolate equally? How many <math>3/4</math>-cup servings are in <math>2/3</math> of a cup of yogurt? How wide is a rectangular strip of land with length <math>3/4</math> mi and area <math>1/2</math> square mi? Compute fluently with multi-digit numbers and find common factors and multiples.</i></p>	<p><b>EE6.NS.1.</b> Compare the relationships between two unit fractions.</p>
<p><b>Compute fluently with multi-digit numbers and find common factors and multiples.</b></p> <p><b>6.NS.2.</b> Fluently divide multi-digit numbers using the standard algorithm.</p>	<p><b>EE6.NS.2.</b> Apply the concept of fair share and equal shares to divide.</p>
<p><b>6.NS.3.</b> Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p>	<p><b>EE6.NS.3.</b> Solve two factor multiplication problems with products up to 50 using concrete objects and/or calculators.</p>
<p><b>6.NS.4.</b> Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two</p>	<p><b>EE6.NS.4.</b> N/A</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express <math>36 + 8</math> as <math>4(9 + 2)</math>.</i> <i>Apply and extend previous understandings of numbers to the system of rational numbers.</i></p>	
<p><b>Apply and extend previous understandings of numbers to the system of rational numbers.</b></p> <p><b>6.NS.5.</b> Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p> <p><b>6.NS.6.</b> Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p> <ul style="list-style-type: none"> <li>▪ Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., <math>-(-3) = 3</math>, and that 0 is its own opposite.</li> <li>▪ Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that</li> </ul>	<p><b>EE6.NS.5-8.</b> Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <ul style="list-style-type: none"> <li>▪ Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</li> </ul> <p><b>6.NS.7.</b> Understand ordering and absolute value of rational numbers.</p> <ul style="list-style-type: none"> <li>▪ Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret <math>-3 &gt; -7</math> as a statement that <math>-3</math> is located to the right of <math>-7</math> on a number line oriented from left to right.</i></li> <li>▪ Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write <math>-3^{\circ}C &gt; -7^{\circ}C</math> to express the fact that <math>-3^{\circ}C</math> is warmer than <math>-7^{\circ}C</math>.</i></li> <li>▪ Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of <math>-30</math> dollars, write <math> -30  = 30</math> to describe the size of the debt in dollars.</i></li> <li>▪ Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than <math>-30</math> dollars represents a debt greater than 30 dollars.</i></li> </ul>	

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>6.NS.8.</b> Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	

### Sixth Grade Mathematics Standards: Expressions and Equations

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Apply and extend previous understandings of arithmetic to algebraic expressions.</b></p> <p><b>6.EE.1.</b> Write and evaluate numerical expressions involving whole-number exponents.</p> <p><b>6.EE.2.</b> Write, read, and evaluate expressions in which letters stand for numbers.</p> <ul style="list-style-type: none"> <li>▪ Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract <math>y</math> from 5” as <math>5 - y</math>.</i></li> <li>▪ Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression <math>2(8 + 7)</math> as a product of two factors; view <math>(8 + 7)</math> as both a single entity and a sum of two terms.</i></li> <li>▪ Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas <math>V = s^3</math> and <math>A = 6s^2</math> to find the volume and surface area of a cube with sides of length <math>s = 1/2</math>.</i></li> </ul>	<p><b>EE6.EE.1-2.</b> Identify equivalent number sentences.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>6.EE.3.</b> Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression <math>3(2 + x)</math> to produce the equivalent expression <math>6 + 3x</math>; apply the distributive property to the expression <math>24x + 18y</math> to produce the equivalent expression <math>6(4x + 3y)</math>; apply properties of operations to <math>y + y + y</math> to produce the equivalent expression <math>3y</math>.</i></p> <p><b>6.EE.4.</b> Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions <math>y + y + y</math> and <math>3y</math> are equivalent because they name the same number regardless of which number <math>y</math> stands for. Reason about and solve one-variable equations and inequalities.</i></p>	<p><b>EE6.EE.3-4.</b> Demonstrate understanding of equivalent expressions.</p>
<p><b>Reason about and solve one-variable equations and inequalities.</b></p> <p><b>6.EE.5.</b> Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p> <p><b>6.EE.6.</b> Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p><b>6.EE.7.</b> Solve real-world and mathematical problems by writing</p>	<p><b>EE6.EE.5-7.</b> Match an equation to a real-world problem in which variables are used to represent numbers.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p</math>, <math>q</math> and <math>x</math> are all nonnegative rational numbers.</p> <p><b>6.EE.8.</b> Write an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or condition in a real world or mathematical problem. Recognize that inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p>	
<p><b>Represent and analyze quantitative relationships between dependent and independent variables.</b></p> <p><b>6.EE.9.</b> Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation <math>d = 65t</math> to represent the relationship between distance and time.</p>	EE6.EE.9. N/A

### Sixth Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Solve real-world and mathematical problems involving area, surface area, and volume.</b></p> <p><b>6.G.1.</b> Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real world and mathematical problems.</p> <p><b>6.G.2.</b> Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas <math>V = lwh</math> and <math>V = bh</math> to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real world and mathematical problems.</p>	<p><b>EE6.G.1-2.</b> Demonstrate area.</p>
<p><b>6.G.3.</b> Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	
<p><b>6.G.4.</b> Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p><b>EE6.G.4.</b> Identify common three-dimensional shapes.</p>



### Sixth Grade Mathematics Standards: Statistics and Probability

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Develop understanding of statistical variability.</b></p> <p><b>6.SP.1.</b> Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i></p> <p><b>6.SP.2.</b> Understand that a set of data collected to answer a statistical question has a distribution, which can be described by its center, spread, and overall shape.</p>	<p><b>EE6.SP.1-2.</b> Display data on a graph or table that shows variability in the data.</p>
<p><b>6.SP.3.</b> Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.</p>	<p><b>EE6.SP.3.</b> N/A</p>
<p><b>Summarize and describe distributions.</b></p> <p><b>6.SP.4.</b> Display numerical data in plots on a number line, including dot plots, histograms, and box plots.</p>	<p><b>EE6.SP.4.</b> N/A (See EE6.SP.1-2)</p>
<p><b>6.SP.5.</b> Summarize numerical data sets in relation to their context, such as by:</p> <ul style="list-style-type: none"> <li>▪ Reporting the number of observations.</li> <li>▪ Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</li> </ul>	<p><b>EE6.SP.5.</b> Summarize data distributions on a graph or table.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<ul style="list-style-type: none"> <li>▪ Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</li> <li>▪ Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</li> </ul>	

## COMMON CORE ESSENTIAL ELEMENTS FOR SEVENTH GRADE

### Seventh Grade Mathematics Standards: Ratios and Proportional Relationships

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Analyze proportional relationships and use them to solve real-world and mathematical problems.</b></p> <p><b>7.RP.1.</b> Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks <math>\frac{1}{2}</math> mile in each <math>\frac{1}{4}</math> hour, compute the unit rate as the complex fraction <math>\frac{1/2}{1/4}</math> miles per hour, equivalently 2 miles per hour.</i></p> <p><b>7.RP.2.</b> Recognize and represent proportional relationships between quantities.</p> <ul style="list-style-type: none"> <li>▪ Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.</li> <li>▪ Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</li> <li>▪ Represent proportional relationships by equations. <i>For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</i></li> <li>▪ Explain what a point <math>(x, y)</math> on the graph of a proportional relationship means in terms of the situation, with special attention to the points <math>(0, 0)</math> and <math>(1, r)</math> where <math>r</math> is the unit</li> </ul>	<p><b>EE7.RP.1-3.</b> Use a ratio to model or describe a relationship.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>rate.</p> <p><b>7.RP.3.</b> Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</p>	

## Seventh Grade Mathematics Standards: The Number System

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</b></p> <p><b>7.NS.1.</b> Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p> <ul style="list-style-type: none"> <li>▪ Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i></li> <li>▪ Understand <math>p + q</math> as the number located a distance <math> q </math> from <math>p</math>, in the positive or negative direction depending on whether <math>q</math> is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.</li> <li>▪ Understand subtraction of rational numbers as adding the additive inverse, <math>p - q = p + (-q)</math>. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.</li> </ul>	<p><b>EE7.NS.1.</b> Add fractions with like denominators (halves, thirds, fourths, and tenths) so the solution is less than or equal to one.</p>
<p><b>Apply properties of operations as strategies to add and subtract rational numbers.</b></p> <p><b>7.NS.2.</b> Apply and extend previous understandings of</p>	<p><b>EE7.NS.2.a.</b> Solve multiplication problems with products to 100.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>multiplication and division and of fractions to multiply and divide rational numbers.</p> <ul style="list-style-type: none"> <li>▪ Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as <math>(-1)(-1) = 1</math> and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If <math>p</math> and <math>q</math> are integers, then <math>-(p/q) = (-p)/q = p/(-q)</math>. Interpret quotients of rational numbers by describing real-world contexts.</li> </ul>	<p><b>EE7.NS.2.b.</b> Solve division problems with divisors up to five and also with a divisor of 10 without remainders.</p>
<ul style="list-style-type: none"> <li>▪ Apply properties of operations as strategies to multiply and divide rational numbers.</li> <li>▪ Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</li> </ul>	<p><b>EE7.NS.2.c-d.</b> Compare fractions to fractions and decimals to decimals using rational numbers less than one.</p>
<p><b>7.NS.3.</b> Solve real-world and mathematical problems involving the four operations with rational numbers.<sup>18</sup></p>	<p><b>EE7.NS.3.</b> Demonstrate the value of various money amounts using decimals.</p>

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<sup>18</sup> Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

### Seventh Grade Mathematics Standards: Expressions and Equations

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Use properties of operations to generate equivalent expressions.</b></p> <p><b>7.EE.1.</b> Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p><b>7.EE.2.</b> Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, <math>a + 0.05a = 1.05a</math> means that “increase by 5%” is the same as “multiply by 1.05.”</i></p>	<p><b>EE7.EE.1-2.</b> Use the relationship within addition and/or multiplication to illustrate that two expressions are equivalent.</p>
<p><b>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</b></p> <p><b>7.EE.3.</b> Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of</i></p>	<p><b>EE7.EE.3-4.</b> Use the concept of equality with models to solve one-step addition and subtraction equations.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p> <p><b>7.EE.4.</b> Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <ul style="list-style-type: none"> <li>▪ Solve word problems leading to equations of the form <math>px + q = r</math> and <math>p(x + q) = r</math>, where <math>p</math>, <math>q</math>, and <math>r</math> are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></li> <li>▪ Solve word problems leading to inequalities of the form <math>px + q &gt; r</math> or <math>px + q &lt; r</math>, where <math>p</math>, <math>q</math>, and <math>r</math> are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></li> </ul>	



**Seventh Grade Mathematics Standards: Geometry**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Draw construct, and describe geometrical figures and describe the relationships between them.</b></p> <p><b>7.G.1.</b> Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p> <p><b>7.G.2.</b> Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.</p>	<p><b>EE7.G.1-2.</b> Draw or classify and recognize basic two-dimensional geometric shapes without a model (circle, triangle, rectangle/square).</p>
<p><b>7.G.3.</b> Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.</p>	<p><b>EE7.G.3.</b> Match a two-dimensional shape with a three-dimensional shape that shares an attribute.</p>
<p><b>Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.</b></p> <p><b>7.G.4.</b> Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.</p>	<p><b>EE7.G.4.</b> N/A</p>
<p><b>7.G.5.</b> Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p>	<p><b>EE7.G.5.</b> Find the perimeter of a rectangle given the length and width.</p>

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>7.G.6.</b> Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	<b>EE7.G.6.</b> Find the area of a rectangle given the length and width using a model.

### Seventh Grade Mathematics Standards: Statistics and Probability

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Use random sampling to draw inferences about a population.</b></p> <p><b>7.SP.1.</b> Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p><b>7.SP.2.</b> Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i></p>	<p><b>EE7.SP.1-2.</b> Answer a question related to the collected data from an experiment, given a model of data, or from data collected by the student.</p>
<p><b>Draw informal comparative inferences about two populations.</b></p> <p><b>7.SP.3.</b> Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability</i></p>	<p><b>EE7.SP.3.</b> Compare two sets of data within a single data display such as a picture graph, line plot, or bar graph.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>(mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i></p> <p><b>7.SP.4.</b> Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i></p>	

<p><b>Investigate chance processes and develop, use, and evaluate probability models.</b></p> <p><b>7.SP.5.</b> Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.</p> <p><b>7.SP.6.</b> Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly</i></p>	<p><b>EE7.SP.5-7.</b> Describe the probability of events occurring as possible or impossible.</p>
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CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>200 times.</i></p> <p><b>7.SP.7.</b> Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p> <ul style="list-style-type: none"> <li>▪ Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></li> <li>▪ Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i></li> </ul>	

## COMMON CORE ESSENTIAL ELEMENTS FOR EIGHTH GRADE

### Eighth Grade Mathematics Standards: The Number System

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Know that there are numbers that are not rational, and approximate them by rational numbers.</b></p> <p><b>8.NS.1.</b> Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.</p>	<p><b>EE8.NS.1.</b> Subtract fractions with like denominators (halves, thirds, fourths, and tenths) with minuends less than or equal to one.</p>
<p><b>8.NS.2.</b> Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., <math>\pi^2</math>). <i>For example, by truncating the decimal expansion of <math>\sqrt{2}</math>, show that <math>\sqrt{2}</math> is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations</i></p>	<p><b>EE8.NS.2.</b> Represent different forms and values of decimal numbers using fractions with numerators that are multiples of five and a denominator of 100.</p>

## Eighth Grade Mathematics Standards: Expressions and Equations

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Expressions and Equations. Work with radicals and integer exponents.</b></p> <p><b>8.EE.1.</b> Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, <math>3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27</math>.</p> <p><b>8.EE.2.</b> Use square root and cube root symbols to represent solutions to equations of the form <math>x^2 = p</math> and <math>x^3 = p</math>, where <math>p</math> is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that <math>\sqrt{2}</math> is irrational.</p> <p><b>8.EE.3.</b> Use numbers expressed in the form of a single digit times a whole-number power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3 times <math>10^8</math> and the population of the world as 7 times <math>10^9</math>, and determine that the world population is more than 20 times larger.</i></p> <p><b>8.EE.4.</b> Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading).</p>	<p><b>EE8.EE.1-4.</b> Compose and decompose numbers to three digits.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
Interpret scientific notation that has been generated by technology.	
<p><b>Understand the connections between proportional relationships, lines, and linear equations.</b></p> <p><b>8.EE.5.</b> Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</p> <p><b>8.EE.6.</b> Use similar triangles to explain why the slope <math>m</math> is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation <math>y = mx</math> for a line through the origin and the equation <math>y = mx + b</math> for a line intercepting the vertical axis at <math>b</math>.</p>	<p><b>EE8.EE.5-6.</b> Graph a simple ratio using the <math>x</math> and <math>y</math> axis points when given the ratio in standard form (2:1) and convert to 2/1.</p>
<p><b>Analyze and solve linear equations and pairs of simultaneous linear equations.</b></p> <p><b>8.EE.7.</b> Solve linear equations in one variable.</p> <ul style="list-style-type: none"> <li>▪ Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form <math>x = a</math>, <math>a = a</math>, or <math>a = b</math> results (where <math>a</math> and <math>b</math> are different numbers).</li> <li>▪ Solve linear equations with rational number</li> </ul>	<p><b>EE8.EE.7.</b> Solve algebraic expressions using simple addition and subtraction.</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
<p>coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p>	
<p><b>8.EE.8.</b> Analyze and solve pairs of simultaneous linear equations.</p> <ul style="list-style-type: none"> <li>▪ Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</li> <li>▪ Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, <math>3x + 2y = 5</math> and <math>3x + 2y = 6</math> have no solution because <math>3x + 2y</math> cannot simultaneously be 5 and 6.</i></li> <li>▪ Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i></li> </ul>	<p><b>EE8.EE.8.</b> N/A (See EE.8.EE.5-6)</p>

### Eighth Grade Mathematics Standards: Functions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Define, evaluate, and compare functions.</b></p> <p><b>8.F.1.</b> Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.<sup>19</sup></p> <p><b>8.F.2.</b> Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i></p> <p><b>8.F.3.</b> Interpret the equation <math>y = mx + b</math> as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function <math>A = s^2</math> giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.</i></p>	<p><b>EE8.F.1-3.</b> Given a function table, identify the missing number.</p>
<p><b>Use functions to model relationships between quantities.</b></p>	<p><b>EE8.F.4.</b> Determine the values or rule of a function using a graph or a table.</p>

<sup>19</sup> Function notation is not required in Grade 8.

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>8.F.4.</b> Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two <math>(x, y)</math> values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.</p>	
<p><b>8.F.5.</b> Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.</p>	<p><b>EE8.F.5.</b> Describe how a graph represents a relationship between two quantities.</p>

### Eighth Grade Mathematics Standards: Geometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand congruence and similarity using physical models, transparencies, or geometry software.</b></p> <p><b>8.G.1.</b> Verify experimentally the properties of rotations, reflections, and translations:</p> <ul style="list-style-type: none"> <li>a. Lines are taken to lines, and line segments to line segments of the same length.</li> <li>b. Angles are taken to angles of the same measure.</li> <li>c. Parallel lines are taken to parallel lines.</li> </ul> <p><b>8.G.2.</b> Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p> <p><b>8.G.3.</b> Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p>	<p><b>EE8.G.1-3.</b> Identify similarity and congruence (same) in objects and shapes containing angles without translations.</p>
<p><b>8.G.4.</b> Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p>	<p><b>EE8.G.4.</b> Identify similar shapes with and without rotation.</p>
<p><b>8.G.5.</b> Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created</p>	<p><b>EE8.G.5.</b> Compare measures of angles to a right angle (greater than, less than, or equal to).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></p>	
<p><b>Understand and apply the Pythagorean Theorem.</b></p> <p><b>8.G.6.</b> Explain a proof of the Pythagorean Theorem and its converse.</p> <p><b>8.G.7.</b> Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.</p> <p><b>8.G.8.</b> Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p>	<p><b>EE8.G.6-8.</b> N/A</p>
<p><b>Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.</b></p> <p><b>8.G.9.</b> Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>	<p><b>EE8.G.9.</b> Identify volume of common measures (cups, pints, quarts, gallons, etc.).</p>

### Eighth Grade Mathematics Standards: Statistics and Probability

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Investigate patterns of association in bivariate data.</b></p> <p><b>8.SP.1.</b> Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p><b>8.SP.2.</b> Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</p> <p><b>8.SP.3.</b> Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></p>	<p>EE8.SP.1-3. N/A</p>
<p><b>8.SP.4.</b> Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies</p>	<p><b>EE8.SP.4.</b> Construct a graph or table from given categorical data and compare data categorized in the graph or table.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></p>	

## COMMON CORE ESSENTIAL ELEMENTS FOR HIGH SCHOOL

### High School Mathematics Standards: Number and Quantity - The Real Number System

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Extend the properties of exponents to rational exponents.</b></p> <p><b>N-RN.1.</b> Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define <math>5^{1/3}</math> to be the cube root of 5 because we want <math>(5^{1/3})^3 = 5^{(1/3)3}</math> to hold, so <math>(5^{1/3})^3</math> must equal 5.</i></p>	<p><b>EEN-RN.1.</b> Solve division problems with remainders using concrete objects.</p>
<p><b>N-RN.2.</b> Rewrite expressions involving radicals and rational exponents using the properties of exponents.</p>	<p><b>EEN-RN.2.</b> N/A</p>
<p><b>Use properties of rational and irrational numbers.</b></p> <p><b>N-RN.3.</b> Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.</p>	<p><b>EEN-RN.3.</b> N/A</p>



### High School Mathematics Standards: Number and Quantity - Quantities

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Reason quantitatively and use units to solve problems.</b></p> <p><b>N-Q.1.</b> Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.</p> <p><b>N-Q.2.</b> Define appropriate quantities for the purpose of descriptive modeling.</p> <p><b>N-Q.3.</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p>	<p><b>EEN-Q.1-3.</b> Express quantities to the appropriate precision of measurement.</p>

### High School Mathematics Standards: Number and Quantity - The Complex Number System

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Perform arithmetic operations with complex numbers.</b></p> <p><b>N-CN.1.</b> Know there is a complex number <math>i</math> such that <math>i^2 = -1</math>, and every complex number has the form <math>a + bi</math> with <math>a</math> and <math>b</math> real.</p>	<p><b>EEN-CN.1.</b> N/A</p>
<p><b>N-CN.2.</b> Use the relation <math>i^2 = -1</math> and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.</p>	<p><b>EEN-CN.2.</b> Use the operations of addition, subtraction, and multiplication with decimals (decimal value x whole number) in real world situations using money as the standard units (\$20, \$10, \$5, \$1, \$0.25, \$0.10, \$0.05, and \$0.01).</p>
<p><b>Use complex numbers in polynomial identities and equations.</b></p> <p><b>N-CN.7.</b> Solve quadratic equations with real coefficients that have complex solutions.</p>	<p><b>EEN-CN.7.</b> N/A</p>

### High School Mathematics Standards: Algebra - Seeing Structure in Expressions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Interpret the structure of expressions.</b></p> <p><b>A-SSE.1.</b> Interpret expressions that represent a quantity in terms of its context.</p> <ul style="list-style-type: none"> <li>▪ Interpret parts of an expression, such as terms, factors, and coefficients.</li> <li>▪ Interpret complicated expressions by viewing one or more of their parts as a single entity. <i>For example, interpret <math>P(1+r)^n</math> as the product of <math>P</math> and a factor not depending on <math>P</math>.</i></li> </ul>	<p><b>EEA-SSE.1.</b> Match an algebraic expression involving one operation to represent a given word expression with an illustration.</p>
<p><b>A-SSE.2.</b> Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i></p>	<p><b>EEA-SSE.2.</b> N/A</p>
<p><b>Write expressions in equivalent forms to solve problems.</b></p> <p><b>A-SSE.3.</b> Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.</p> <ol style="list-style-type: none"> <li>a. Factor a quadratic expression to reveal the zeros of the function it defines.</li> <li>b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.</li> <li>c. Use the properties of exponents to transform expressions for exponential functions. <i>For example the expression <math>1.15^t</math> can be rewritten as <math>(1.15^{1/12})^{12t} \approx 1.012^{12t}</math> to reveal the</i></li> </ol>	<p><b>EEA-SSE.3.</b> Solve simple one-step equations (multiplication and division) with a variable.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>approximate equivalent monthly interest rate if the annual rate is 15%.</i></p>	
<p><b>A-SSE.4.</b> Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. <i>For example, calculate mortgage payments.</i></p>	<p><b>EEA-SSE.4</b> Identify the missing part in any other equivalent ratio when given any ratio.</p>

### High School Mathematics Standards: Algebra - Arithmetic with Polynomials and Rational Expressions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Perform arithmetic operations on polynomials.</b></p> <p><b>A-APR.1.</b> Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.</p>	EEA-APR.1 N/A

### High School Mathematics Standards: Algebra - Creating Equations

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Create equations that describe numbers or relationships.</b></p> <p><b>A-CED.1.</b> Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i></p>	<p><b>EEA-CED.1.</b> Solve an algebraic expression using subtraction.</p>
<p><b>A-CED.2.</b> Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p> <p><b>A-CED.3.</b> Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i></p> <p><b>A-CED.4.</b> Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. <i>For example, rearrange Ohm's law <math>V = IR</math> to highlight resistance <math>R</math>.</i></p>	<p><b>EEA-CED.2-4.</b> Solve one-step inequalities.</p>

### High School Mathematics Standards: Algebra - Reasoning with Equations and Inequalities

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand solving equations as a process of reasoning and explain the reasoning.</b></p> <p><b>A-REI.1.</b> Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.</p> <p><b>A-REI.2.</b> Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.</p>	<p>EEA-REI.1-2. N/A</p>
<p><b>Solve equations and inequalities in one variable.</b></p> <p><b>A-REI.3.</b> Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</p> <p><b>A-REI.4.</b> Solve quadratic equations in one variable.</p> <ul style="list-style-type: none"> <li>▪ Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form.</li> <li>▪ Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives</li> </ul>	<p>EEA-REI.3. N/A (See EEA-ECED.1-2.)</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p>complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>.</p>	
<p><b>Solve systems of equations.</b></p> <p><b>A-REI.5.</b> Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.</p>	<p><b>EEA-REI.5.</b> N/A</p>
<p><b>A-REI.6.</b> Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.</p> <p><b>A-REI.7.</b> Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>.</p>	<p><b>EEA-REI.6-7.</b> N/A (See EEA-REI.10-12.)</p>
<p><b>Represent and solve equations and inequalities graphically.</b></p> <p><b>A-REI.10.</b> Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).</p> <p><b>A-REI.11.</b> Explain why the <math>x</math>-coordinates of the points where the graphs of the equations <math>y = f(x)</math> and <math>y = g(x)</math> intersect are the solutions of the equation <math>f(x) = g(x)</math>; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where <math>f(x)</math> and/or <math>g(x)</math> are linear, polynomial,</p>	<p><b>EEA-REI.10.-12.</b> Determine the two pieces of information that are plotted on a graph of an equation with two variables that form a line when plotted.</p>



CCSS Grade-Level Clusters	Common Core Essential Elements
<p>rational, absolute value, exponential, and logarithmic functions.</p> <p><b>A-REI.12.</b> Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.</p>	

## High School Mathematics Standards: Functions - Interpreting Functions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand the concept of a function and use function notation.</b></p> <p><b>F-IF.1.</b> Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If <math>f</math> is a function and <math>x</math> is an element of its domain, then <math>f(x)</math> denotes the output of <math>f</math> corresponding to the input <math>x</math>. The graph of <math>f</math> is the graph of the equation <math>y = f(x)</math>.</p> <p><b>F-IF.2.</b> Use function notations, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p> <p><b>F-IF.3.</b> Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. <i>For example, the Fibonacci sequence is defined recursively by <math>f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1)</math> for <math>n \geq 1</math>.</i></p>	<p><b>EEF-IF.1-3.</b> Use the concept of function to solve problems.</p>
<p><b>Interpret functions that arise in applications in terms of the context.</b></p> <p><b>F-IF.4.</b> For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include</i></p>	<p><b>EEF-IF.4-6.</b> Interpret rate of change (e.g., higher/lower, faster/slower).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.</i></p> <p><b>F-IF.5.</b> Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function <math>h(n)</math> gives the number of person-hours it takes to assemble <math>n</math> engines in a factory, then the positive integers would be an appropriate domain for the function.</i></p> <p><b>F-IF.6.</b> Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.</p>	
<p><b>Analyze functions using different representations.</b></p> <p><b>F-IF.7.</b> Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.</p> <ol style="list-style-type: none"> <li>Graph linear and quadratic functions and show intercepts, maxima, and minima.</li> <li>Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.</li> <li>Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.</li> <li>Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.</li> </ol>	<p><b>EEF-IF.7.</b> N/A (See EEF-IF.1-3)</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>F-IF.8.</b> Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.</p> <p>Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^t/10</math>, and classify them as representing exponential growth or decay.</p>	<p><b>EEF-IF.8.</b> N/A</p>
<p><b>F-IF.9.</b> Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i></p>	<p><b>EEF-IF.9.</b> N/A</p>

### High School Mathematics Standards: Functions - Building Functions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Build a function that models a relationship between two quantities.</b></p> <p><b>F-BF.1.</b> Write a function that describes a relationship between two quantities.</p> <ul style="list-style-type: none"> <li>▪ Determine an explicit expression, a recursive process, or steps for calculation from a context.</li> <li>▪ Combine standard function types using arithmetic operations. <i>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</i></li> </ul>	<p><b>EEF-BF.1.</b> Select the appropriate graphical representation (first quadrant) given a situation involving constant rate of change.</p>
<p><b>F-BF.2.</b> Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.</p>	<p><b>EEF-BF.2.</b> Build an arithmetic sequence when provided a recursive rule with whole numbers.</p>
<p><b>Build new functions from existing functions.</b></p> <p><b>F-BF.3.</b> Identify the effect on the graph of replacing <math>f(x)</math> by <math>f(x) + k</math>, <math>k f(x)</math>, <math>f(kx)</math>, and <math>f(x + k)</math> for specific values of <math>k</math> (both positive and negative); find the value of <math>k</math> given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.</p> <p><b>F-BF.4.</b> Find inverse functions. Solve an equation of the form <math>f(x)</math></p>	<p><b>EEF-BF.3-4.</b> N/A</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
= c for a simple function f that has an inverse and write an expression for the inverse. <i>For example, <math>f(x) = 2x^3</math> or <math>f(x) = (x+1)/(x-1)</math> for <math>x \neq 1</math>.</i>	

## High School Mathematics Standards: Functions - Linear, Quadratic, and Exponential Models

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Construct and compare linear, quadratic, and exponential models and solve problems.</b></p> <p><b>F-LE.1.</b> Distinguish between situations that can be modeled with linear functions and with exponential functions.</p> <ul style="list-style-type: none"> <li>▪ Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.</li> <li>▪ Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.</li> <li>▪ Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.</li> </ul> <p><b>F-LE.2.</b> Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).</p> <p><b>F-LE.3.</b> Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.</p> <p><b>F-LE.4.</b> For exponential models, express as a logarithm the solution to <math>ab^{ct} = d</math> where <math>a</math>, <math>c</math>, and <math>d</math> are numbers and the base <math>b</math> is 2, 10, or <math>e</math>; evaluate the logarithm using technology.</p>	<p><b>EEF-LE.1.</b> Model a simple linear function such as <math>y=mx</math> to show functions grow by equal factors over equal intervals.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Interpret expressions for functions in terms of the situation they model.</b></p> <p><b>F-LE.5.</b> Interpret the parameters in a linear or exponential function in terms of a context.</p>	<p>EEF-LE.5. N/A</p>



### High School Mathematics Standards: Functions - Trigonometric Functions

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Extend the domain of trigonometric functions using the unit circle.</b></p> <p><b>F-TF.1.</b> Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.</p> <p><b>F-TF.2.</b> Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.</p>	<p>EEF-TF.1-2. N/A</p>
<p><b>Model periodic phenomena with trigonometric functions.</b></p> <p><b>F-TF.5.</b> Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.</p>	<p>EEF-TF.5. N/A</p>
<p><b>Prove and apply trigonometric identities.</b></p> <p><b>F-TF.8.</b> Prove the Pythagorean identity <math>\sin^2(\theta) + \cos^2(\theta) = 1</math> and use it to find <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> given <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> and the quadrant of the angle.</p>	<p>EEF-TF.8. N/A</p>

### High School Mathematics Standards: Geometry - Congruence

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Experiment with transformations in the plane.</b></p> <p><b>G-CO.1.</b> Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.</p>	<p><b>EEG-CO.1.</b> Know the attributes of perpendicular lines, parallel lines, and line segments, angles, and circles.</p>
<p><b>G-CO.2.</b> Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).</p>	<p><b>EEG-CO.2.</b> N/A</p>
<p><b>G-CO.3.</b> Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.</p>	<p><b>EEG-CO.3.</b> N/A</p>
<p><b>G-CO.4.</b> Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.</p> <p><b>G-CO.5.</b> Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.</p>	<p><b>EEG-CO.4-5.</b> Identify rotations, reflections, and slides.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand congruence in terms of rigid motions.</b></p> <p><b>G-CO.6.</b> Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.</p> <p><b>G-CO.7.</b> Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.</p> <p><b>G-CO.8.</b> Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.</p>	<p><b>EEG-CO.6-8.</b> Identify corresponding congruent (the same) parts of shapes.</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Prove geometric theorems</b></p> <p><b>G-CO.9.</b> Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i></p> <p><b>G-CO.10.</b> Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i></p> <p><b>G-CO.11.</b> Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i></p>	<p>EEG-CO.9-11. N/A</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Make geometric constructions.</b></p> <p><b>G-CO.12.</b> Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).  <i>Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</i></p> <p><b>G-CO.13.</b> Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.</p>	<p><b>EEG-CO.12-13.</b> N/A</p>

## High School Mathematics Standards: Geometry - Similarity, Right Triangles, and Trigonometry

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand similarity in terms of similarity transformations.</b></p> <p><b>G-SRT.1.</b> Verify experimentally the properties of dilations given by a center and a scale factor:</p> <ul style="list-style-type: none"> <li>▪ A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.</li> <li>▪ The dilation of a line segment is longer or shorter in the ratio given by the scale factor.</li> </ul> <p><b>G-SRT.2.</b> Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.</p> <p><b>G-SRT.3.</b> Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</p>	<p><b>EEG-SRT.1-3.</b> N/A (See EEG-CO.6-8.)</p>
<p><b>Prove theorems involving similarity.</b></p> <p><b>G-SRT.4.</b> Prove theorems about triangles. <i>Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</i></p> <p><b>G-SRT.5.</b> Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.</p>	<p><b>EEG-SRT.4-5.</b> N/A</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Define trigonometric ratios and solve problems involving right triangles.</b></p> <p><b>G-SRT.6.</b> Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</p> <p><b>G-SRT.7.</b> Explain and use the relationship between the sine and cosine of complementary angles.</p> <p><b>G-SRT.8.</b> Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</p>	<p>EEG-SRT.6-8. N/A</p>

**High School Mathematics Standards: Geometry - Circles**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand and apply theorems about circles.</b></p> <p><b>G-C.1.</b> Prove that all circles are similar.</p> <p><b>G-C.2.</b> Identify and describe relationships among inscribed angles, radii, and chords. <i>Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</i></p> <p><b>G-C.3.</b> Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.</p>	<p>EEG-C.1-3. N/A</p>
<p><b>Find arc lengths and areas of sectors of circles.</b></p> <p><b>G-C.5.</b> Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.</p>	<p>EEG-C.5. N/A</p>



### High School Mathematics Standards: Geometry - Expressing Geometric Properties with Equations

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Translate between the geometric description and the equation for a conic section.</b></p> <p><b>G-GPE.1.</b> Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.</p>	<p>EEG-GPE.1. N/A</p>
<p><b>G-GPE.2.</b> Derive the equation of a parabola given a focus and directrix.</p>	<p>EEG-GPE.2-4. N/A</p>
<p><b>Use coordinates to prove simple geometric theorems algebraically.</b></p> <p><b>G-GPE.4.</b> Use coordinates to prove simple geometric theorems algebraically. <i>For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point <math>(1, \sqrt{3})</math> lies on the circle centered at the origin and containing the point <math>(0, 2)</math>.</i></p>	<p>EEG-GPE.4. N/A (See EEG-GPE)</p>
<p><b>G-GPE.5.</b> Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).</p> <p><b>G-GPE.6.</b> Find the point on a directed line segment between two given points that partitions the segment in a given ratio.</p>	<p>EEG-GPE.5-6. N/A (See EEG.CO.1)</p>

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>G-GPE.7.</b> Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.	<b>EEG-GPE.7.</b> Find perimeter and area of squares and rectangles to solve real-world problems.

**High School Mathematics Standards: Geometry - Geometric Measurement and Dimension**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Explain volume formulas and use them to solve problems.</b></p> <p><b>G-GMD.1.</b> Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri’s principle, and informal limit arguments.</i></p> <p><b>G-GMD.3.</b> Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.</p>	<p><b>EEG-GMD.1-3.</b> Make a prediction based on knowledge of volume to identify volume of common containers (cups, pints, gallons, etc.).</p>
<p><b>Visualize relationships between two-dimensional and three-dimensional objects.</b></p> <p><b>G-GMD.4.</b> Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.</p>	<p><b>EEG-GMD.4.</b> Distinguish between two-dimensional and three-dimensional objects to solve real-world problems.</p>

**High School Mathematics Standards: Geometry - Modeling with Geometry**

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<p><b>Apply geometric concepts in modeling situations.</b></p> <p><b>G-MG.1.</b> Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).</p> <p><b>G-MG.2.</b> Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).</p> <p><b>G-MG.3.</b> Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).</p>	<p><b>EEG-MG.1-3.</b> Use properties of geometric shapes to describe real-life objects.</p>

### High School Mathematics Standards: Statistics and Probability - Interpreting Categorical and Quantitative Data

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Summarize, represent, and interpret data on a single count or measurement variable.</b></p> <p><b>S-ID.1.</b> Represent data with plots on the real number line (dot plots, histograms, and box plots).</p> <p><b>S-ID.2.</b> Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.</p>	<p><b>EES-ID.1-2.</b> Given data, construct a simple graph (table, line, pie, bar, or picture) and answer questions about the data.</p>
<p><b>S-ID.3.</b> Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</p>	<p><b>EES-ID.3.</b> Indicate general trends on a graph or chart.</p>
<p><b>S-ID.4.</b> Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.</p>	<p><b>EES-ID.4.</b> Calculate the mean of a given data set (limit data points to less than five).</p>

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Summarize, represent, and interpret data on two categorical and quantitative variables.</b></p> <p><b>S-ID.5.</b> Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.</p> <p><b>S-ID.6.</b> Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.</p> <p>a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</p> <p>b. Informally assess the fit of a function by plotting and analyzing residuals.</p> <p>c. Fit a linear function for a scatter plot that suggests a linear association.</p>	<p><b>EES-ID.5.</b> N/A (See EEF-IF.1. and EEA-REI.6-7)</p>
<p><b>Interpret linear models.</b></p> <p><b>S-ID.7.</b> Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.</p>	<p><b>EES-ID.7.</b> N/A (See EEF-IF.4-6)</p>
<p><b>S-ID.8.</b> Compute (using technology) and interpret the correlation coefficient of a linear fit.</p> <p><b>S-ID.9.</b> Distinguish between correlation and causation.</p>	<p><b>EES-ID.8-9.</b> N/A</p>

**High School Mathematics Standards: Statistics and Probability - Making Inferences and Justifying Conclusions**

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand and evaluate random processes underlying statistical experiments.</b></p> <p><b>S-IC.1.</b> Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</p> <p><b>S-IC.2.</b> Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. <i>For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?</i></p>	<p><b>EES-IC.1-2.</b> Determine the likelihood of an event occurring when the outcomes are equally likely to occur.</p>
<p><b>Make inferences and justify conclusions from sample surveys, experiments, and observational studies.</b></p> <p><b>S-IC.3.</b> Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.</p> <p><b>S-IC.4.</b> Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.</p> <p><b>S-IC.5.</b> Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.</p>	<p><b>EES-IC.3-6.</b> N/A (See EES-ID.1-2)</p>

<b>CCSS Grade-Level Clusters</b>	<b>Common Core Essential Elements</b>
<b>S-IC.6.</b> Evaluate reports based on data.	



### High School Mathematics Standards: Statistics and Probability - Conditional Probability and the Rules of Probability

CCSS Grade-Level Clusters	Common Core Essential Elements
<p><b>Understand independence and conditional probability and use them to interpret data.</b></p> <p><b>S-CP.1.</b> Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).</p> <p><b>S-CP.2.</b> Understand that two events <math>A</math> and <math>B</math> are independent if the probability of <math>A</math> and <math>B</math> occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</p> <p><b>S-CP.3.</b> Understand the conditional probability of <math>A</math> given <math>B</math> as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of <math>A</math> and <math>B</math> as saying that the conditional probability of <math>A</math> given <math>B</math> is the same as the probability of <math>A</math>, and the conditional probability of <math>B</math> given <math>A</math> is the same as the probability of <math>B</math>.</p> <p><b>S-CP.4.</b> Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that</i></p>	<p><b>EES-CP.1-4.</b> Identify when events are independent or dependent.</p>

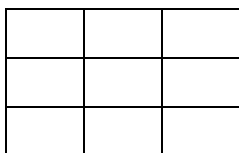
CCSS Grade-Level Clusters	Common Core Essential Elements
<p><i>the student is in tenth grade. Do the same for other subjects and compare the results.</i></p> <p><b>S-CP.5.</b> Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i></p>	
<p><b>Use the rules of probability to compute probabilities of compound events in a uniform probability model.</b></p> <p><b>S-CP.6.</b> Find the conditional probability of <math>A</math> given <math>B</math> as the fraction of <math>B</math>'s outcomes that also belong to <math>A</math>, and interpret the answer in terms of the model.</p> <p><b>S-CP.7.</b> Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model.</p>	<p><b>EES-CP.6-7.</b> N/A (See EES-IC.1-2)</p>

## GLOSSARY AND EXAMPLES OF MATHEMATICS TERMS

**Acute triangle.** A triangle with all acute angles (acute means measuring less than  $90^\circ$ ). See <http://www.mathsisfun.com/definitions/acute-triangle.html>

**Angles.** A shape formed by two lines or rays that diverge from a common point or vertex.

**Area.** The size of a region enclosed by the figure. Area is measured in square units (e.g., the area of this rectangle is six square units).



**Associative property for addition.** The sum of three or more numbers which are always the same when added together, no matter what order they are in. This is illustrated by  $a + (b + c) = (a + b) + c$ ;  $2 + (3 + 4) = (2 + 3) + 4$ .

**Associative property for multiplication.** The product of three or more numbers which are always the same when multiplied together, regardless of their grouping. This is illustrated by  $a(bc) = (ab)c$ ;  $2(3 \times 4) = (2 \times 3)4$ .

**Attributes.** For math purposes, “attributes” refer to characteristics of an object or geometric shape. These include qualities of shape, color, size, side, length, etc.

**Base ten blocks.** Blocks used to learn place value, addition, subtraction, multiplication, and division. Base ten blocks consist of cubes (ones place), rods (tens place), flats (hundreds place), and blocks (thousands place).

**Categorical data.** Types of data, which may be divided into groups such as race, sex, age group, and educational level when categorized into a small number of groups.

**Commutative property of addition.** The sum of numbers are always the same when added together, no matter if the order of the addends are changed. This is illustrated by  $a + b = b + a$  ( $2 + 1 = 1 + 2$ ).

**Commutative property of multiplication.** The product of numbers are always the same when multiplied together, even if the order of factors are changed (i.e., if  $a$  and  $b$  are two real numbers, then  $a \times b = b \times a$ .)

**Compose numbers.** To combine parts/components to form a number (adding parts to obtain a number).

**Congruent figures.** Figures that have the same size and shape.

**Congruent/congruence.** The same.

**Decompose numbers.** The process of separating numbers into their components (to divide a number into smaller parts). *Example:* 456 can be decomposed as  $456 = 400 + 50 + 6$ .

**Denominator.** The “bottom” number of a fraction; the number that represents the total number of parts into which one whole is divided (e.g., in  $\frac{3}{4}$ , the 4 is the denominator and indicates that one whole is divided into 4 parts).

**Dividend.** The number that is being divided (e.g., In the problem, there are 550 pencils; each pack has 10 pencils; how many packs are there?  $550 \div 10 = 55$ , 550 is the dividend because it tells how many pencils there are in all to be divided.).

**Divisor.** A number by which another number is divided (e.g., In the problem, there are 550 pencils; each pack has 10 pencils; how many packs are there?  $550 \div 10 = 55$ , 10 is the divisor because it tells how many times 550 is to be divided.

**Edge.** The line segment where two faces of a solid figure meet (i.e., a cube has 12 edges).

**ELA.** English Language Arts

**Equation.** A mathematical sentence of equality between two expressions; equations have an equal sign (e.g.,  $n + 50 = 75$  or  $75 = n + 50$  means that  $n + 50$  must have the same value as 75).

**Equilateral triangle.** A triangle with all three sides of equal length, corresponding to what could also be known as a “regular” triangle – an equilateral triangle is therefore a special case of an isosceles triangle having not just two but all three sides equal. An equilateral triangle also has three equal angles. See <http://www.mathsisfun.com/definitions/equilateral-triangle.html>

**Expression.** An operation between numbers that represents a single numeric quantity; expressions do not have an equal sign (e.g.,  $4r$ ,  $x+2$ ,  $y-1$ ).

**Face.** A plane surface of a three-dimensional figure.

**Fact families.** Sets of related math facts. For example:

Addition fact family:  $3 + 5 = 8$ ;  $8 - 3 = 5$ ;  $5 + 3 = 8$ ; and  $8 - 5 = 3$

Multiplication fact family:  $5 \times 4 = 20$ ;  $20 \div 5 = 4$ ;  $4 \times 5 = 20$ ; and  $20 \div 4 = 5$

**Fair share.** In division meaning splitting into equal parts or groups with nothing left over.

**Frequency table.** A table that lists items and uses tally marks to record and show the number of times they occur.

**Functions.** A special kind of relation where each x-value has one and only one y-value.

**Function table.** A table that lists pairs of numbers that show a function.

**Inequality.** A mathematical sentence in which the value of the expressions on either side of the relationship symbol are unequal; relation symbols used in inequalities include  $>$  (greater than) and  $<$  (less than) symbols (e.g.,  $7 > 3$ ,  $x < y$ ).

**Input/output table.** A table that lists pairs of numbers that show a function.

**Integers.** Positive and negative whole numbers.

**Interlocking cubes.** Manipulatives that help students learn number and math concepts - cubes represent “units” and link in one direction. Interlocking cubes are used for patterning, grouping, sorting, counting, numbers, addition, subtraction, multiplication, division, and measurement.

**Intersecting lines.** Lines that cross.

**Inverse operations.** Opposite/reverse operations (e.g., subtraction is the inverse operation of addition, which is why  $4 + 5 = 9$  and  $9 - 5 = 4$ ; division is the inverse operation of multiplication, which is why  $4 \times 5 = 20$  and  $20 \div 5 = 4$ ).

**Linear equation.** An equation that is made up of two expressions set equal to each other (e.g.,  $y = 2x + 5$ ) - A linear equation has only one or two variables and graph as a straight line. See <http://www.eduplace.com/math/mathsteps/7/d/index.html>

**Line graph.** A graphical representation using points connected by line segments to show how something changes over time.

**Lines of symmetry.** Any imaginary line along which a figure could be folded so that both halves match exactly.

**Manipulatives.** Objects that are used to explore mathematical ideas and solve mathematical problems (e.g., tools, models, blocks, tiles cubes, geoboards, colored rods, M&M’s).

**Mathematical structures.**

***Addition – compare-total unknown***

Ex. If Anita has 10 sheets of paper and you have 10 more sheets than Anita. How many sheets do you have?

***Addition – start unknown***

Ex. Sam gave away 10 apples and has five apples left. How many apples did he start have before he gave 10 apples?

***Addition join-part/part – whole***

Ex. Jessie had 20 cakes and bought five more. How many does he have now?

***Subtraction – classic take away***

Ex. If Judy had \$50 and spent \$10, how much does she have left?

***Subtraction – difference unknown***

Ex. Sandi has 10 cats and 20 dogs. Which does she have more of, cats or dogs? How many more?

***Subtraction – deficit missing amount***

Ex. Sandy wants to collect 35 cards and she already has 15. How many more cards does she need?

***Multiplication – repeated addition***

Ex. James got paid \$5 each day for five days. How much money did he have at the end of the five days?

***Multiplication – array***

Ex. Carlos wanted to cover his rectangular paper with one-inch tiles. If his paper is five inches long and four inches wide, how many tiles will it take to cover the paper?

***Multiplication – fundamental counting principle***

Ex. Julie packed four shirts and four jeans for her trip. How many outfits can she make?

***Division – repeated subtraction***

Ex. James pays \$5 each day to ride the bus. How many days can he ride for \$20?

***Division – factor/area – side length***

Ex. Tim wants to know the width of a rectangular surface covered in 20 one-inch tiles. He knows the length is five inches, but what is the width?

***Division – partitive/fair share***

Ex. Julie has 20 different outfits. She has five shirts – how many pair of jeans does she have to make 20 different outfits?

**Mean.** The "average" – To find the mean, add up all the numbers and then divide by the number of numbers.

**Median.** The "middle" value in the list of numbers - To find the median, your numbers have to be listed in numerical order, so you may have to rewrite your list.

**Minuend.** The number one is subtracting from (e.g., 9 in  $9 - 2 = \underline{\quad}$ ).

**Mode.** The value that occurs most often - If no number is repeated, then there is no mode for the list. See <http://www.purplemath.com/modules/meanmode.htm>

**Models.** Pictorial or tactile aids used explore mathematical ideas and solve mathematical problems – Manipulatives can be used to model situations.

**Non-numeric patterns.** Using symbols, shapes, designs, and pictures to make patterns (e.g.,  $\square\square\Delta\Delta\Diamond\Diamond\square\square\Delta\Delta\Diamond\Diamond$ ).

**Non-standard units of measure.** Measurements that are neither metric nor English (e.g., number of footsteps used to measure distance or using a piece of yarn used to measure length).

**Number line.** A diagram that represents numbers as points on a line; a number line must have the arrows at the end.

**Number sentence.** An equation or inequality using numbers and symbols that is written horizontally (e.g.,  $5 < 7$  or  $5 + 7 = 12$ ).

**Numerals.** 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

**Numeric patterns.** A pattern that uses skip counting, often starting with the number 1 or 2 – Counting by tens and twos may also be presented to students beginning with different numbers such as 7 or 23; this is more difficult for students but indicates a deeper understanding of skip counting (e.g., 7, 17, 27, 37, 47, . . . or 7, 9, 11, 13, 15, 17).

**Numerical expression.** A mathematical phrase that involves only numbers and one or more operational symbols.

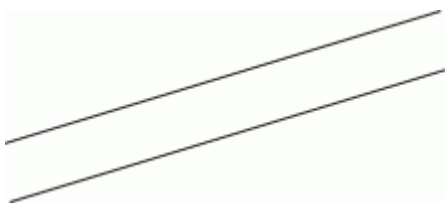
**Obtuse triangle.** A triangle that has one obtuse angle (obtuse means measuring more than  $90^\circ$ ). See <http://www.mathsisfun.com/definitions/obtuse-triangle.html>

**Operations.** Addition, subtraction, multiplication, and division.

**Ordered pair.** In the ordered pair (1, 3), the first number is called the x-coordinate; the second number is called the y-coordinate; this ordered pair represents the coordinates of point A.

- The x-coordinate tells the distance right (positive) or left (negative).
- The y-coordinate tells the distance up (positive) or down (negative).

**Parallel Lines.** Lines that are the same distance apart and that never intersect – Lines that have the same slope are parallel.



**Pattern.** Patterns with a minimum of three terms

- using numbers by repeatedly adding or subtracting (i.e., 2, 4, 6, 8, 10, 12; 0, 3, 6, 9, 12, 15; or 50, 45, 40, 35, 30, 25).
- using objects, figures, colors, sound, etc. - a repeated pattern needs to be at least six terms.

**Extend a pattern** - When a student is asked to continue a pattern, the pattern is presented, and the student is asked, “What comes next?” before a student can extend or describe a pattern, the given pattern must be comprised of a minimum of three terms so that the student can see the regularities of the situation and extend or describe the pattern based on those regularities.

**Percent.** A way of expressing a fraction as “out of 100” (e.g., 50% means 50 out of 100 or 50/100).

**Perpendicular lines.** Lines that intersect, forming right angles.

**Polygon.** A closed plane figure made by line segments.

**Prediction.** A guess based on available information.

**Quadrilateral.** A four-sided polygon.

**Rational numbers.** Any number that can be expressed as  $a/b$  ( $b \neq 0$ ) where  $a$  and  $b$  are integers; also, in decimal form, any terminating or ultimately repeating decimal.

**Ratios.** A comparison between two things. For instance, someone can look at a group of people and refer to the “ratio of boys to girls” in the class. Suppose there are 35 students, 15 of whom are boys; the ratio of boys to girls is 15 to 20. See <http://www.purplemath.com/modules/ratio.htm>

**Real-life situations.** Ways in which mathematical concepts are used in real life.

**Real numbers.** All numbers on a number line, including negative and positive integers, fractions, and irrational numbers.

**Real-world applications.** Ways in which mathematical concepts are used in real-life situations.

**Rectangle.** A four-sided polygon (a flat shape with straight sides) where every angle is a right angle ( $90^\circ$ ); opposite sides are parallel and of equal length.

**Right triangle.** A triangle that has one right angle (a right angle measures exactly  $90^\circ$ ) – Only a single angle in a triangle can be a right angle or it would not be a triangle. A small square is used to mark which angle in the figure is the right angle.



**Sets.** A group or collection of things that go together (e.g., a group of four stars).

**Side.** In most general terms, a line segment that is part of the figure - it is connected at either end to another line segment, which, in turn, may or may not be connected to still other line segments.

**Similar figures.** Figures that have the same shape but different sizes.

**Similar shapes.** Objects of the same shape but different sizes in which the corresponding angles are the same.

**Slope.** The steepness/incline/grade of a line.

*Positive slope* – the condition in which a line inclines from left to right.

*Negative slope* – the condition in which a line declines from left to right.

**Square.** A four-sided polygon (a flat shape with straight sides) where all sides have equal length and every angle is a right angle ( $90^\circ$ ).

**Square root.** A value that can be multiplied by itself to give the original number (e.g., the square root of 25 is 5 because  $5 \times 5 = 25$ ).

**Square root notation.** Numbers written using a radical  $\sqrt{\quad}$ .

**Subitize.** To judge the number of objects in a group accurately without counting.

**Three-dimensional geometric figures.** The study of solid figures in three-dimensional space: cube, rectangular prism, sphere, cone, cylinder, and pyramid.

**Two-dimensional figures.** The study of two-dimensional figures in a plane; drawings of square, rectangle, circle, triangle, pentagon, hexagon, and octagon.

**Unknown fixed quantities.** A constant that is a quantity; a value that does not change.

**Variable.** A symbol for an unknown number to be solved; it is usually a letter like  $x$  or  $y$  (e.g., in  $x + 3 = 7$ ,  $x$  is the variable).

**Venn diagram.** Made up of two or more overlapping circles. It is often used in mathematics to show relationships between sets. A Venn diagram enables students to organize similarities and differences visually.

**Vertex** (vertices, pl.). The point(s) where two or more edges meet (corners).

**Volume.** The amount of three-dimensional space an object occupies; capacity.

## GLOSSARY OF SPECIAL EDUCATION TERMS

**Accommodations.** Changes in the administration of an assessment, such as setting, scheduling, timing, presentation format, response mode, or others, including any combination of these that does not change the construct intended to be measured by the assessment or the meaning of the resulting scores. Accommodations are used for equity, not advantage, and serve to level the playing field. To be appropriate, assessment accommodations must be identified in the student's Individualized Education Plan (IEP) or Section 504 plan and used regularly during instruction and classroom assessment.

**Achievement descriptors.** Narrative descriptions of performance levels that convey student performance at each achievement level and further defines content standards by connecting them to information that describes how well students are doing in learning the knowledge and skills contained in the content standards. (See also "performance descriptors.")

**Achievement levels.** A measurement that distinguishes an adequate performance from a Level I or expert performance. Achievement levels provide a determination of the extent to which a student has met the content standards. (See also Performance levels.)

**Achievement standard.** A system that includes performance levels (e.g., unsatisfactory, Level III, advanced), descriptions of student performance for each level, examples of student work representing the entire range of performance for each level, and cut scores. A system of performance standards operationalizes and further defines content standards by connecting them to information that describes how well students are doing in learning the knowledge and skills contained in the content standards. (See also "performance standards.")

**Achievement test.** An instrument designed to efficiently measure the amount of academic knowledge and/or skill a student has acquired from instruction. Such tests provide information that can be compared to either a norm group or a measure of performance, such as a standard.

**Age appropriate.** The characteristics of the skills taught, the activities and materials selected, and the language level employed that reflect the chronological age of the student.

**Alignment.** The similarity or match between or among content standards, achievement (performance) standards, curriculum, instruction, and assessments in terms of equal breadth, depth, and complexity of knowledge and skill expectations.

**Alternate assessment.** An instrument used in gathering information on the standards-based performance and progress of students whose disabilities preclude their valid and reliable participation in general assessments. Alternate assessments measure the performance of a relatively small population of students who are unable to participate in the general assessment system, even with accommodations, as determined by the IEP team.

**Assessment.** The process of collecting information about individuals, groups, or systems that relies upon a number of instruments, one of which may be a test. Therefore, assessment is a more comprehensive term than *test*.

**Assessment literacy.** The knowledge of the basic principles of sound assessment practice including terminology, development, administration, analysis, and standards of quality.

**Assistance** (vs. support). The degree to which the teacher provides aid to the student's performance that provides direct assistance in the content or skill being demonstrated by the student. That is, the assistance involves the teacher performing the cognitive work required. Assistance results in an invalidation of the item or score. (See also "support.")

**Assistive technology.** A device, piece of equipment, product system, or service that is used to increase, maintain, or improve the functional capabilities of a student with a disability. (See 34 CFR §300.5 and 300.6.)

**Cues.** Assistance, words, or actions provided to a student to increase the likelihood that the student will give the desired response.

**Curriculum.** A document that describes what teachers do in order to convey grade-level knowledge and skills to a student.

**Depth.** The level of cognitive processing (e.g., recognition, recall, problem solving, analysis, synthesis, and evaluation) required for success relative to the performance standards.

**Disaggregation.** The collection and reporting of student achievement results by particular subgroups (e.g., students with disabilities, limited English Level III students) to ascertain the subgroup's academic progress. Disaggregation makes it possible to compare subgroups or cohorts.

**Essence of the standard.** That which conveys the same ideas, skills, and content of the standard, expressed in simpler terms.

**Essential Elements (EEs or CCEEs).** The Common Core Essential Elements are specific statements of the content and skills that are linked to the Common Core State Standards (CCSS) grade level specific expectations for students with significant cognitive disabilities.

**Grade Band Essential Element.** A statement of essential precursor content and skills linked to the Common Core State Standards (CCSS) grade level clusters and indicators that maintain the essence of that standard, thereby identifying the grade-level expectations for students with significant cognitive disabilities to access and make progress in the general curriculum.

**Grade level.** The grade in which a student is enrolled.

**Instructional Achievement Level Descriptors (IALDs).** Describes student achievement and illustrates student performance. IALDs operationalize and further define Essential Elements by

connecting them to information that describes how well students are doing in learning the knowledge and skills contained in the Essential Elements.

**Individualized Education Program (IEP).** An IEP is a written plan, developed by a team of regular and special educators, parents, related service personnel, and the student, as appropriate, describing the specially designed instruction needed for an eligible exceptional student to progress in the content standards and objectives and to meet other educational needs.

**Linked.** A relationship between a grade level indicator for Common Core State Standards (CCSS) and Common Core Essential Elements (EEs or CCEEs) that reflects similar content and skills but does not match the breadth, depth, and complexity of the standards.

**Multiple measures.** Measurement of student or school performance through more than one form or test.

- For students, these might include teacher observations, performance assessments or portfolios.
- For schools, these might include dropout rates, absenteeism, college attendance or documented behavior problems

**Natural cue.** Assistance given to a student that provides a flow among the expectations presented by the educator, opportunities to learn, and the desired outcome exhibited by the student.

**Opportunity to learn.** The provision of learning conditions, including suitable adjustments, to maximize a student's chances of attaining the desired learning outcomes, such as the mastery of content standards.

**Readability.** The formatting of presented material that considers the organization of text; syntactic complexity of sentences; use of abstractions; density of concepts; sequence and organization of ideas; page format; sentence length; paragraph length; variety of punctuation; student background knowledge or interest; and use of illustrations or graphics in determining the appropriate level of difficulty of instructional or assessment materials.

**Real-world application.** The opportunity for a student to exhibit a behavior or complete a task that he or she would normally be expected to perform outside of the school environment.

**Response requirements.** The type, kind, or method of action required of a student to answer a question or testing item. The response may include, but is not limited to, reading, writing, speaking, creating, and drawing.

**Stakeholders.** A group of individuals perceived to be vested in a particular decision (e.g., a policy decision).

**Standardized.** An established procedure that assures that a test is administered with the same directions, and under the same conditions and is scored in the same manner for all students to ensure the comparability of scores. Standardization allows reliable and valid comparison to be made among students taking the test. The two major types of standardized tests are norm-referenced and criterion-referenced.

**Standards.** There are two types of standards, content and achievement (performance).

- **Content standards.** Statements of the subject-specific knowledge and skills that schools are expected to teach students, indicating what students should know and be able to do.
- **Achievement (Performance) standards.** Indices of qualities that specify how adept or competent a student demonstration must be and consist of the following four components:
  - levels that provide descriptive labels or narratives for student performance (i.e., advanced, Level III, etc.);
  - descriptions of what students at each particular level must demonstrate relative to the task;
  - examples of student work at each level illustrating the range of performance within each level; and
  - cut scores clearly separating each performance level.

**Standards-based assessments.** Assessments constructed to measure how well students have mastered specific content standards or skills.

**Test.** A measuring device or procedure. Educational tests are typically composed of questions or tasks designed to elicit predetermined behavioral responses or to measure specific academic content standards.

**Test presentation.** The method, manner, or structure in which test items or assessments are administered to the student.

**Universal design of assessment.** A method for developing an assessment to ensure accessibility by all students regardless of ability or disability. Universal design of assessment is based on principles used in the field of architecture in which user diversity is considered during the conceptual stage of development.

*\*Adapted from the Glossary of Assessment Terms and Acronyms Used in Assessing Special Education Students: A Report from the Assessing Special Education Students (ASES) State Collaborative on Assessment and Student Standards (SCASS)*

## BIBLIOGRAPHY OF DEVELOPMENT PROCESS

- Council of Chief State School Officers (CCSSO). (2003). *Glossary of assessment terms and acronyms used in assessing special education students: A report from the Assessing Special Education Students (ASES) State Collaborative on Assessment and Student Standards (SCASS)*. Washington, DC: Author. Retrieved from [http://www.ccsso.org/Documents/2006/Assessing\\_Students\\_with\\_Disabilities\\_Glossary\\_2006.pdf](http://www.ccsso.org/Documents/2006/Assessing_Students_with_Disabilities_Glossary_2006.pdf)
- Education Commission of the States. (1998). *Designing and implementing standards-based accountability systems*. Denver, CO: Author. Retrieved from <http://www.eric.ed.gov/PDFS/ED419275.pdf>
- Hansche, L. (1998). *Handbook for the development of performance standards: Meeting the requirements of Title I*. Washington, DC: U.S. Department of Education (ED) and CCSSO. Retrieved from <http://www.eric.ed.gov/PDFS/ED427027.pdf>
- Jaeger, R. M., & Tucker, C. G. (1998). *Analyzing, disaggregating, reporting, and interpreting students' achievement test results: A guide to practice for Title I and beyond*. Washington, DC: CCSSO.
- Johnstone, C. J. (2003). *Improving validity of large-scale tests: Universal design and student performance* (Technical Report 37). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes (NCEO). Retrieved from <http://www.cehd.umn.edu/nceo/onlinepubs/technical37.htm>.
- Lehr, C., & Thurlow, M. (2003). *Putting it all together: Including students with disabilities in assessment and accountability systems* (Policy Directions No. 16). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/NCEO/onlinepubs/Policy16.htm>
- Linn, R. L., & Herman, J. L. (1997). *A policymaker's guide to standards-led assessment*. Denver, CO: National Center for Research on Evaluation, Standards, and Student Testing (CRESST) & Education Commission of the States (ECS) Distribution Center. Retrieved from <http://www.eric.ed.gov/PDFS/ED408680.pdf>
- McKean, E. (Ed.). (2005). *The New Oxford American Dictionary* (2nd ed.). New York, NY: Oxford University Press.
- Quenemoen, R., Thompson, S., & Thurlow, M. (2003). *Measuring academic achievement of students with significant cognitive disabilities: Building understanding of alternate assessment scoring criteria* (Synthesis Report 50). Minneapolis, MN: University of

- Minnesota, NCEO. Retrieved from  
<http://www.cehd.umn.edu/NCEO/onlinepubs/Synthesis50.html>
- Rabinowitz, S., Roeber, E., Schroeder, C., & Sheinker, J. (2006). *Creating aligned standards and assessment systems*. Washington, DC: CCSSO. Retrieved from  
[http://www.ccsso.org/Documents/2006/Creating\\_Aligned\\_Standards\\_2006.pdf](http://www.ccsso.org/Documents/2006/Creating_Aligned_Standards_2006.pdf)
- Roeber, E. (2002). *Setting standards on alternate assessments* (Synthesis Report 42). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from  
<http://www.cehd.umn.edu/nceo/OnlinePubs/Synthesis42.html>
- Sheinker, J. M. (2004, April 26). *Achievement standards for alternate assessments: What is standard setting?* Teleconference presentation for the National Center for Educational Outcomes to 38 State Departments of Education, Minneapolis, MN. Retrieved from  
<http://www.cehd.umn.edu/nceo/teleconferences/tele08/default.html>
- Sheinker, J. M., & Redfield, D. L. (2001). *Handbook for professional development on assessment literacy*. Washington, DC: CCSSO.
- Thompson, S. J., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large scale assessments* (Synthesis Report 44). Minneapolis, MN: University of Minnesota, NCEO. Retrieved from <http://www.cehd.umn.edu/nceo/onlinepubs/Synthesis44.html>
- Ysseldyke, J., Krentz, J., Elliott, J., Thurlow, M. L., Erickson, R., & Moore, M. L. (1998). *NCEO framework For educational accountability*. Minneapolis, MN: University of Minnesota, NCEO. Retrieved from  
<http://www.cehd.umn.edu/NCEO/onlinepubs/archive/Framework/FrameworkText.html>

## BIBLIOGRAPHY FOR MATHEMATICS CONTENT

- Blaha, R., & Cooper, H. (2009, February 12-14). Academic learners with deafblindness: Providing access to the general curriculum. Paper presented at the Purpose, Satisfaction, and Joy in the Lives of Students with Deafblindness and the People Who Care Conference, Austin, TX. Retrieved from [http://www.tsbvi.edu/attachments/handouts/feb09/BlahaCooperAcademAccessGenEd\\_handout.doc](http://www.tsbvi.edu/attachments/handouts/feb09/BlahaCooperAcademAccessGenEd_handout.doc)
- Browder, D. M. & Spooner, F. (Eds.). (2006). *Teaching language arts, math, and science to students with significant cognitive disabilities*. Baltimore, MD: Brookes Publishing Co. Retrieved from <http://www.brookespublishing.com/store/books/browder-7985/index.htm>
- Burris, C., Heubert, J., & Levin, H. (2004). Math acceleration for all. *Educational Leadership: Improving Achievement in Math and Science*, 61(5), 68-71. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD). Retrieved from <http://www.ascd.org/publications/educational-leadership/feb04/vol61/num05/Math-Acceleration-for-All.aspx>
- Clements, D. H. (1999, March). Subitizing: What is it? Why teach it? *Teaching Children Mathematics*, 5(7), 400-405. Reston, VA: National Council of Teachers of Mathematics. Retrieved from <http://www.nctm.org/publications/article.aspx?id=20890>
- Clements, D. H. (1999, January). Teaching length measurement: Research challenges. *School Science and Mathematics*, 99(1), 5-11. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/ssm.1999.99.issue-1/issuetoc>
- Clements, D. H., & Sarama, J. (2010). Technology. In V. Washington & J. Andrews (Eds.), *Children of 2020: Creating a better tomorrow* (pp. 119-123). Washington, DC: Council for Professional Recognition/National Association for the Education of Young Children.
- Clements, D. H., Sarama, J., & Wolfe, C. B. (2011). *Tools for early assessment in mathematics (TEAM)*. Columbus, OH: McGraw-Hill Education. Retrieved from <https://www.mheonline.com/program/view/4/4/335/007TEAM>
- Cooney, S., & Bottoms, G. (2002). *Middle grades to high school: Mending a weak link* (Research brief). Atlanta, GA: Southern Regional Education Board. Retrieved from [http://publications.sreb.org/2002/02V08\\_Middle\\_Grades\\_To\\_HS.pdf](http://publications.sreb.org/2002/02V08_Middle_Grades_To_HS.pdf)
- Daro, P. (2011, February). Unlocking the common core: Common core state standards. Webinar for the Common Core Virtual Conference, sponsored by Pearson Education. Retrieved from <http://commoncore.pearsoned.com/index.cfm?locator=PS1324>



- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2006). *Learning disabilities: From identification to intervention*. New York, NY: Guilford Press.
- Ford, R. (2006, January). *High school profiles of mathematically unprepared college freshmen*. Paper presented at the fourth annual International Conference on Education, Honolulu, HI.
- Fuchs, L. S., Compton, D. L., Fuchs, D., Paulsen, K., Bryant, J. D., & Hamlett, C. L. (2005). The prevention, identification, and cognitive determinants of math difficulty. *Journal of Educational Psychology, 97*(3), 493-513.
- Fuchs, L. S., Fuchs, D., Compton, D. L., Powell, S. R., Seethaler, P. M., Capizzi, A. M., Schatschneider, C., & Fletcher, J. M. (2006). The cognitive correlates of third-grade skill in arithmetic, algorithmic computation, and arithmetic word problems. *Journal of Educational Psychology, 98*(1), 29-43.
- Fuchs, L. S., Fuchs, D., Powell, S. R., Seethaler, P. M., Cirino, P. T., & Fletcher, J. M. (2008). Intensive intervention for students with mathematics disabilities: seven principles of effective practice. *Learning Disability Quarterly, 31*(2), 79-92. Retrieved from <http://www.mendeley.com/research/intensive-intervention-students-mathematics-disabilities-seven-principles-effective-practice-4/>
- Fuchs, L. S., Powell, S. R., Seethaler, P. M., Fuchs, D., Hamlett, C. L., Cirino, P., & Fletcher, J. M. (2007). *Intensive intervention on number combination and story problem deficits in third graders with math difficulties, with and without concurrent reading difficulties*. Manuscript submitted for publication.
- Fuson, K. C., Clements, D. H., & Beckmann, S. (2010). *Focus in Grade 1: Teaching with the curriculum focal points*. Reston, VA: National Council of Teachers of Mathematics. Retrieved from <http://www.nctm.org/catalog/product.aspx?id=13628>
- Ginsburg, A., & Leinwand, S. (2009). *Informing Grades 1-6 mathematics standards development: What can be learned from high-performing Hong Kong, Korea, and Singapore?* Washington, DC: American Institutes for Research. Retrieved from <http://www.air.org/files/MathStandards.pdf>
- James B. Hunt Jr. Institute for Educational Leadership and Policy. (n.d.). *Common core state standards – General brief*. Retrieved from [http://www.edweek.org/media/fordham\\_event.pdf](http://www.edweek.org/media/fordham_event.pdf)
- Kroesbergen, E. H., & Van Luit, J.E.H. (2003). *Mathematics interventions for children with special needs: A meta-analysis*. *Remedial and Special Education, 24*(2), 97-114. Retrieved from <http://rse.sagepub.com/content/24/2/97.abstract>
- Maccini, P., Mulcahy, C. A., & Wilson, M. G. (2007). A follow-up of mathematics interventions for secondary students with learning disabilities. *Learning Disabilities Research and*

- Practice*, 22(1), 58-74. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-5826.2007.00231.x/abstract>
- Miller, S. P., & Hudson, P.J. (2007). Using evidence-based practices to build mathematics competence related to conceptual, procedural, and declarative knowledge. *Learning Disabilities Research and Practice*, 22(1), 47-57. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-5826.2007.00230.x/abstract>
- Montague, M. (2007). Self-regulation and mathematics instruction. *Learning Disabilities Research and Practice*, 22(1), 75-83. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-5826.2007.00232.x/abstract>
- National Governors Association for Best Practices (NGA Center) & Council of Chief State School Officers (CCSSO). (2011). *The standards: Mathematics*. Retrieved from <http://www.corestandards.org/the-standards/mathematics>.
- NGA Center & CCSSO. (2010). *Common core state standards for mathematics. Appendix A: Designing high school mathematics courses based on the common core state standards*. Retrieved from [http://www.corestandards.org/assets/CCSSI\\_Mathematics\\_Appendix\\_A.pdf](http://www.corestandards.org/assets/CCSSI_Mathematics_Appendix_A.pdf)
- Sarama, J., & Clements, D. H. (2010). The mathematical lives of young children. In V. Washington & J. Andrews (Eds.), *Children of 2020: Creating a better tomorrow* (pp. 81-84). Washington, DC: Council for Professional Recognition/National Association for the Education of Young Children.
- Sarama, J., & Clements, D. H. (2009). Teaching math in the primary grades: The learning trajectories approach. *Young Children*, 64(2), 63-65. Retrieved from [http://www.naeyc.org/files/yc/file/Primary\\_Interest\\_BTJ.pdf](http://www.naeyc.org/files/yc/file/Primary_Interest_BTJ.pdf)
- Schmidt, B., Houang, R., & Cogan, L. (2002). A coherent curriculum: The case of mathematics. *American Educator*, 26(2), 1-18. Retrieved from <http://www.aft.org/pdfs/americaneducator/summer2002/curriculum.pdf>
- Swanson, H. L. (2006). Cross-sectional and incremental changes in working memory and mathematical problem solving. *Journal of Educational Psychology*, 98, 265-281.
- Thompson, S. J., Morse, A. B., Sharpe, M., & Hall, S. (2005). *Accommodations manual: How to select, administer and evaluate use of accommodations and assessment for students with disabilities* (2nd ed.). Washington, DC: CCSSO. Retrieved from [http://www.ccsso.org/Documents/2005/Accommodations\\_Manual\\_How\\_2005.pdf](http://www.ccsso.org/Documents/2005/Accommodations_Manual_How_2005.pdf)
- Washington Office of the Superintendent of Public Instruction. (2008). *Guidelines for accelerating students into high school mathematics in grade 8*. Olympia, WA: Author. Retrieved from <http://www.k12.wa.us/Mathematics/Standards/Compression.pdf>

Wiley, A., Wyatt, J. & Camara, W. J. (2010). *The development of a multidimensional college readiness index* (Research Report No. 2010-3). New York, NY: The College Board.

Retrieved from

[http://professionals.collegeboard.com/profdownload/pdf/10b\\_2084\\_DevMultiDimenRR\\_WEB\\_100618.pdf](http://professionals.collegeboard.com/profdownload/pdf/10b_2084_DevMultiDimenRR_WEB_100618.pdf)

**APPENDIX A**  
**SEA/Stakeholder Demographics**

<b>Name</b>	<b>State</b>	<b>Area of Certification</b>	<b>Current Assignment</b>	<b>Other Grades Taught</b>	<b>Special Population Experience</b>	<b>Ethnicity</b>	<b>Years of Experience</b>	<b>Highest Degree</b>
Barbara Adams	IA	No response	K-12 Mathematics Curriculum Coordinator	No response	No response	Caucasian	21-25	PhD
Roula AlMouabbi	MI	Secondary Math 6-12; Bilingual Arabic/French 6-12	HS Bilingual Algebra/Geometry. College Algebra	9-11 and College	Arabic, French, African	Caucasian	21-25	MA
Robin Barbour	NC	All Subjects 4-6; 6-9 Math and Science; AIG certification	Secondary Math Consultant for NC Dept. of Public Instruction	7-8 Math; 9th Physical Science; Algebra 1; Integrated Math	General Education with inclusion experience	Caucasian	21-25	MA
Tamara Barrientos	MI	K-5 Elementary; 6-8 Math/Science	Director, Saginaw Valley State University Regional Mathematics and Science Center	6-8 Math	N/A	Hispanic	11-15	MA
DiRae Boyd	KS	Core Content Mesh K-6; Elementary K-9; LD K-9; MR K-9; SPED ELA K-9; SPED History and Government K-9; SPED Math K-9; SPED Science K-9	Functional 6-8 inter-related teacher	Special Education 6-8; Summer School to K-12 Special Education	MR; S/P; Autism; ED; DB; MD: HI; OHI; TBI; LD	Caucasian	16-20	BA
Lynda Brown	UT	ESL/Elem Math/Early Childhood Endorsement	Math Coach K-6 (4 schools, general and special ed.)	2-6 General Education	Special Education and Inclusion	Caucasian	30+	MED

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Sue Burger	NJ	Elementary/ Teacher of Handicapped	Special Education/ Curriculum Specialist	HS Resource	HS Resource; Autism; OHI; MLD; BD; Preschool Disabled	Caucasian	30+	BA
Jennifer Burns	OK	Special Education – all contents	Assessment Coordinator for Special Education Services for State Dept. of Ed.	Special Education Pre-K and 6-8	S/P; MI/MO	Caucasian	6-10	MED/ MS
John Butz	IA	Math K-8; K-6 Elementary Education	2nd grade teacher	5th grade	Instruction of Special Education in General Education classroom	Caucasian	16-20	BA
Laurel Cakinberk	IA	Special Education Strategist II	Special Education	Middle/HS	MO/S/P	Caucasian	11-15	MA
Sharon Campione	MO	LD 1-8; MH/BD K-9; Spec Ed Admin K- 12; Principal K-12	Functional, Life Skills, Self- contained 4-6	Middle School 7- 8/Special Education	SSD Coordinator; Teacher Assist severe population	Caucasian	16-20	MS
Wendy Carver	UT	Communication Disorders/Special Education K-12+; Speech Language Pathology, Psychology, Mild/Mod Dis, ELA	Special Education Assessment Specialist	Special Education K- 12+	MI/MO/S	Caucasian	30+	MS
Beth Cipoletti	WV	Math 7-12	Assistant Director, Office of	Math 7-12 and college; taught	Inclusion Classes	Caucasian	30+	EdD

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			Assessment and Accountability	teacher preparation courses (mathematics)				
Emily Combs	MO	Math 5-9/ ELA 5-9	Math 7th grade	General Education Grade 6	Inclusion; special service, IEP	Caucasian	11-15	MS
Sidney Cooley	KS	Math; Special Education	State Mathematics Consultant	General Education 7-12	Integrated Math grades 7-9; State LD consultant	Caucasian	30+	PhD
Shirley Cooper	NJ	Math	State Mathematics Coordinator	General Education	Inclusion	African American	30+	MS
Jeff Crawford	WA	Math	HS Math, 9-12	College Mathematics	Low SES	Caucasian	16-20	MS
Amy Daugherty	OK	Special Education – All contents	Associate State Director for Special Education Services, State Dept. of Ed.	Special Education K-12	S/P; Emotional Disturbed	Caucasian	6-10	BS
John DeBenedetti	WA	Special Education	4-5 Extended Resource	N/A	Special Education teacher	Caucasian	6-10	BS
Thomas Deeter	IA	NA	Lead Consultant (General Education) Assessment, Accountability, Program Evaluation	General Education		Asian-Caucasian	21-25	PhD
Jennie DeFriez	UT	Administrative/ Supervisory Certification; Level	Utah State Office of Education Elementary Math	General Education Grades 4-7; Math/Science	Assistant to State Special Education Assessment	Caucasian	11-15	MED

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		2 Math endorsement; Level 2 Elementary Education License, middle level education	Assessment Specialist/Assistant Special Education Assessment Specialist		Specialist			
Kirsten Dlugo	WA	6-8 ELA, Math, Reading and Special Education	Special Education Teacher 6-8, Life Skills Classroom	Ungraded classroom for blind ages 12-16	VI; DB; Aut; MD; LD; BD, ID	Caucasian	6-10	MED
Amber Eckes	WI	Elementary Education and LD; Reading Teacher	Special Education Manager Grades 6-8	Reading 6-8; Math 6-8 and summer classes K-3	Special Education manager/teacher	Caucasian	6-10	BS
John Eisenberg	VA	Special Education	Virginia Department of Education Director of Instructional Support and Related Services	Special Education	ASD; SD; ID	Caucasian	11-15	MS
Lin Everett	MO	K-5 Administrator/Principal; 4-8 SS; K-8 General Education: Lifetime Certificate; 4-8 Middle School Admin/Principal; Superintendent's certification, K-12	MO Dept. of Education Assistant Director of Assessment/Office of CCR	Self-contained 1-4; ELA Middle; Principal K-8, Methods for pre-service teachers/University	Special Ed Coordinator	Caucasian	30+	EdS
Dagny Fidler	IA	Director of Special	Vice-	Special Education K-	Focus on students	Caucasian	30+	PhD



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		Education; PK-12 Principal; PK-12 Special Education Supervisor	Principal/Special Education Supervisor (focus on students with SCD)	12, College instruction	with significant disabilities			
Kim Fratto	UT	Under review	District Level Teacher Specialist for Students w/Significant Cognitive Disabilities	K-6 Special Education	K-6 Resource Teacher; Inclusion Specialist; Special Education Coordinator; Teacher specialist K-12+, Teacher Specialist, students with SCD	Caucasian	11-15	MS
Rosemary Gardner	WI	Elementary Education 1-8; SSLD PreK-12; Principal; Director of Special Education; Pupil Services	Special Education; Educational Programmer	General Education 1 & 2, and Special Education intermediate and middle school	Special Education Teacher/Support Admin	Caucasian	26-30	MS
Melissa Gholson	WV	Multi-Subjects K-8; Mental Impairments, Autism, Behavior Disorders, Specific LD K-21; Principal and Superintendent	WV Dept. of Education, Office of Assessment and Accountability, Alternate Assessment and Accommodations	Elementary (general and special education), Middle School (special education); High School (general and special education), , College (teacher	Supervisor of Special Education; Special education teaching experience with autism, mild, moderate, severe and profound, mental	Caucasian	16-20	MA

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				preparation courses)	impairments, behavior disorders, gifted and learning disabilities			
Debra Hawkins	WA	ESEA School Psychology	Director Classroom Assessment Integration	General Education Post-Secondary Level	Profoundly Mentally Handicapped	Caucasian	21-25	EdD
Linda Howley	MI	State Education Assessment Representative	State Education Assessment Representative			Caucasian	11-16	MS
Angelita Jagla	WA	Elementary K-8; Teacher of English as a Second Language; Reading and Math M.S. Ed; NBCT	General Education–4th grade		Special Education, low SES, ELL	Mexican-American	6-10	MS
Brian Johnson	WI	Special Education	Special Education		CD; Autism; EBD	Caucasian	6-10	MS
MaryAnn Joseph	NJ	NBCT; Middle Childhood Generalist; Special Education K-12	Special Education Consultant NJDOE/OSEP	Special Education Severe/Profound, Middle School; 5-6 In Class Resource Planning (special ed), self-contained classroom ages 7-11; General and Special Education Pre-K-1	Severe/Profound; Learning Disabled K-8	Caucasian	30+	MED

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Sara King	MO	No response	Special Education ages 18-20	Special Education ages 14-20	Special Education	Caucasian	6-10	MA
Teresa Kraft	KS	Education of the Deaf	Curriculum and Assessment Coordinator, KS School for the Deaf		Deaf/HOH/Multi-handicapped; Visual Impairments	Caucasian	30+	MED
Tracey Lank	NJ	Special Education	Special Education 3-5 grades	Special Education 1, 2, and 6th grades	Multiple Disabilities	Caucasian	1-5	
Ronda Layman	NC	Speech Language; EC Administration	EC Lead Teacher/SLP-Autism and low incidence		Autism; Severe/Profound	Caucasian	21-25	MED
Wesley Lilly	WV	Special Education K-Adult (MI, LD, BD, Autism, Severe Mental Disabilities; Secondary Education; K-12 (Physical Education)	Secondary Special Education MI/Severe/Autism	Special Education K-8 MI/Severe/Autism/LD/BD	MI/Severe/Autism/LD/BD; worked with designing alternate assessment	Caucasian	6-10	MA
Diane Lucas	VA	Elementary Reading, Math, Social Studies, and Science	Special Education Classroom Resource Teacher (AT Team Leader)	Early Childhood Special Education	Special Education pre K-12, ID, SD, Autism, LD	Caucasian	30+	MS
Michele Luksa	KS	Severe Disabilities	Special Education Consulting Teacher for Elementary	Special Education Consulting Teacher 5-12	Severe Disabilities; Deaf-Blind, Autism	Caucasian	26-30	MA

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Deborah Matthews	KS	Students with Significant Cognitive Disabilities and Early Childhood	Kansas State Department of Education	Early childhood-high school	Early Childhood; Students with Significant Cognitive Disabilities	Caucasian	21-25	MS
Melissa Mobley	WV	Autism/Mental Impairment	Supervisor of Special Education – Autism and all levels of mental impairment	Autism K-8	Autism; Mental Impairments preK-Adult	Caucasian	6-10	MA
Lisa New	WV	Math 7-12; Business Principles 7-12	HS Algebra I, Algebra support teacher	General Education Grades 5-12	Team teacher; inclusion; item writing for alternate assessment	Caucasian Native American	21-25	MS
Karen Pace	MO	Math 7-12	HS Math Teacher	General Education Math 7-9	LD, BD, ELL, low SES	Caucasian	30+	MED
Brain Pianosi	MI	Self-contained Elementary 6-8 Math/Science; K-12 Special Ed.; Cognitive Impairment Administration – certified elementary principal, supervisor and	Director of a Center-based school serving students with Moderate to Severe Cognitive, severe multiple impairments, autism; behavior needs	General Education 3rd grade; Special Education HS Cross Categorical	Deaf son; Daughter with LD; Special Olympics volunteer	Caucasian	21-25	MA

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		director certifications in special ed.						
Mary Richards	WI	WI Educator Grades 1-8	Math Coach PK-8	General Education K-6; Title I Math 1-4; Gifted and Talented Grades 1-5	Inclusion	Caucasian	30+	MS
Laura Searce	VA	Math Specialist K-8	Math Coach K-5	Inclusion Grades 3 and 5	Inclusion; Gifted and Talented	Caucasian	11-15	MED
Lisa Seipert	UT	MI/MOD/Severe Special Education	ID/SID self-contained Grades 7-9	LD/CD Self-contained Grades 7-9	LD/ID/SID	Caucasian	11-15	BS
Katie Slane	NJ	Math and LA	7th Grade Special Education, self-contained and inclusive	Special Education 2-5 self-contained	LD and Autism	Caucasian	1-5	BA
Janet Sockwell	NC	Severe/Profound K-12; Mentally handicapped K-12; B/E Handicapped K-12; LD K-12; Birth - Kindergarten	Special Education Preschool Coordinator and Support for ID-Mod/Severe	Special Education K-12 moderate to profound	Moderate/severe/profound, behavior-emotional disturbed, pre-school	Caucasian	21-25	BS

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Christie Stephenson	OK	MI/Mod; Severe/Profound	Elementary Special Education Supervisor	K-12	LD. ID. MD Autism, OHI	Caucasian	6-10	BS
Deena Swain	WV	Multi-subjects K-8; BD; autism/admin	RESA Director of Special Education	General Education K-8; Math and Science at Alt. School/Juvenile Detention Center Grades 7-9; Autism K-12	Experience teaching students with ASD, Trainer of teachers and administrators on SE issues	Caucasian	16-20	MA
Emily Thatcher	IA	K-12 Strat I MD; K-12 Strat II MD. Multi-cat 6-12; BD K-6; Severe and Profound K-12; Special Education Consultant	Iowa Dept. of Ed., Bureau of Student and Family Support Services (SPED), Instructional Content Resource and Alternate Assessment Consultant	Special Education and Art K-12	22 years varied experience	Caucasian	21-25	MED
Larry Timm	MI	Special Education CI; Industrial Education	Middle School CI Math 6-8	General Education 6-8 Tech Ed.	Mod to Mild C.I.	Caucasian	16-20	MA
Mona Tjaden	KS	Elementary K-9; EMR and TMR Special Education K-9; Special Education Supervisor K-12; Library Media K-12	Special Education Program Coordinator	Special Education Program Coordinator	Special Education Teacher and Coordinator	Caucasian	30+	MS

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Janice Tornow	WA	General and Special Education K-12	WA Office of Superintendent of Public Instruction	Special Education K-12	Special Education Teacher and Administrator	Caucasian	30+	MED
Jane VanDeZande	MO	ELA and Special Education (Handicapped Learner)	Director of Assessment	5-8 Speech and Language and LD; ELA and Social Studies 9-12	Chapter I Director Math and Reading, Special Education	Irish American	16-20	Other Degree
Joyce Viscomi	VA	Elementary K-5 (reading, math, social studies, science)	Special Education Intellectually Impaired, Multiple Handicapped and OHI	Special Education – preK-12	Special Education Intellectually Impaired, Multiple Handicapped, Severe and Profound, OHI	Caucasian	21-25	BS
Nicole Warren	UT	Early Childhood Education; Elementary Math Endorsement; ESL Endorsement, Admin. Certification	Elementary Math Coach; General and Special Education, facilitate elementary endorsement classes	General Education Kindergarten. Coached all grades K-6.	Assisted Special Education Teachers in Math Curriculum, Instruction, and Assessment	Caucasian	11-15	MED
Roslynn Webb	VA	History/ELA	Math 6-8		Multi/Intellectual Disabilities	Black	6-10	MS
Deborah Wickham	VA	Postgraduate Professional License Admin PreK – 12; Early Education NK-4, Division Superintendent	Math Specialist K-5	General Education K-5 and college (per-service and graduate)	Worked with special needs students	Caucasian	26-30	PhD

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		License						
Joanne Winkelman	MI	Elementary and Special Education	State Agency	General Education 6-12	Special Education experience	Caucasian	21-25	PhD
Jeff Ziegler	WI	Math 9-12	HS Math Resource Teacher		Inclusion	Caucasian	16-20	MS