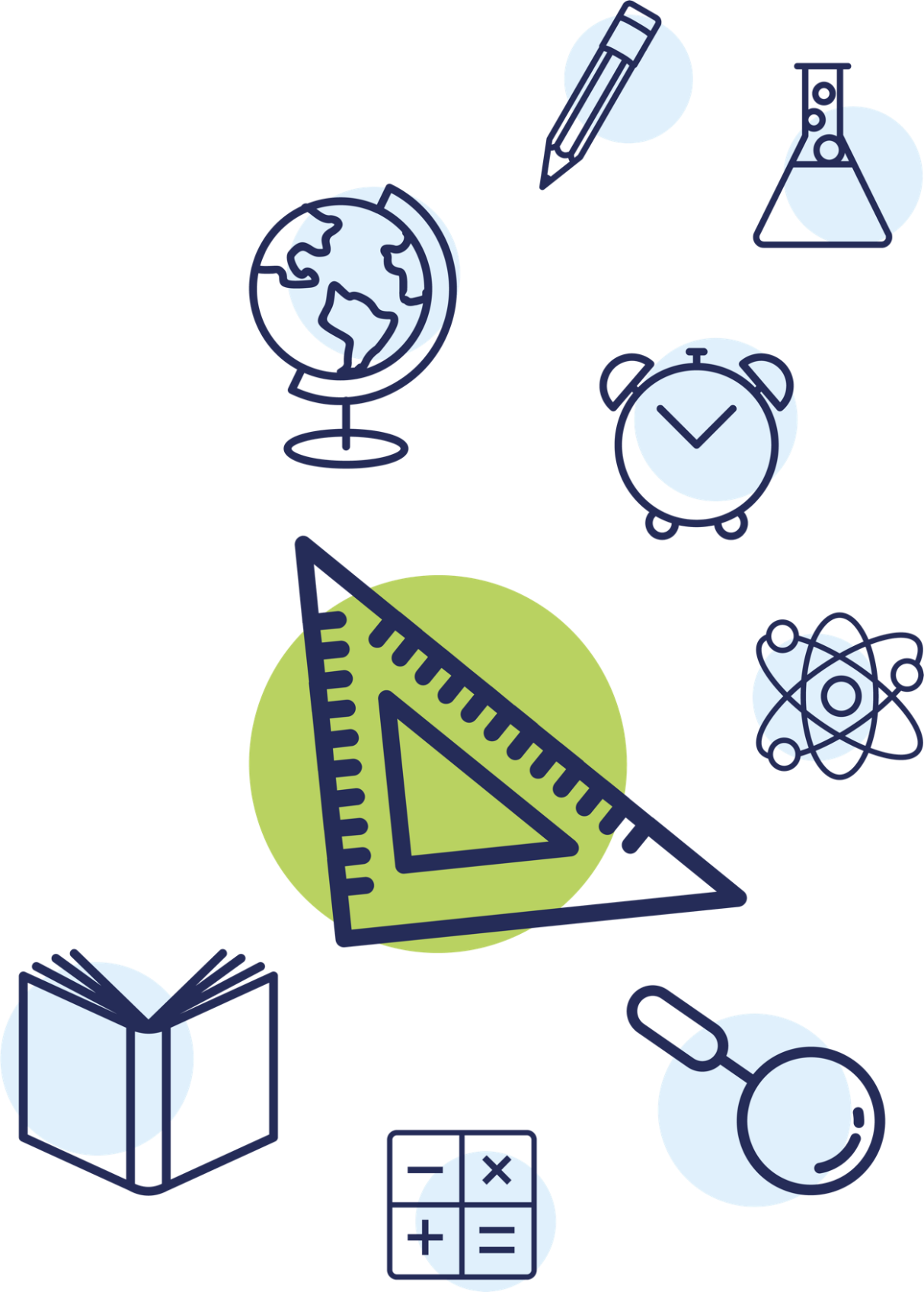
****

****

SUGGESTED

**INSTRUCTIONAL**

**PLANNING GUIDE**

*for the Mississippi College- and Career-Readiness Standards*

**q Mathematics**

|  |
| --- |
| **Grade 2** |

The Mississippi State Board of Education, the Mississippi Department of Education, the Mississippi School for the Arts, the Mississippi School for the Blind, the Mississippi School for the Deaf, and the Mississippi School for Mathematics and Science do not discriminate on the basis of race, sex, color, religion, national origin, age, or disability in the provision of educational programs and services or employment opportunities and benefits. The following office has been designated to handle inquiries and complaints regarding the non‑discrimination policies of the above mentioned entities: Director, Office of Human Resources, Mississippi Department of Education, 359 North West Street, P.O. Box 771, Jackson, MS  39205‑0771,  (601)359-3513.

**Mississippi Department of Education**359 North West Street

P. O. Box 771

Jackson, Mississippi 39205-0771

(601) 359-3513

[www.mdek12.org](http://www.mdek12.org)

|  |  |
| --- | --- |
| **MISSISSIPPI DEPARTMENT OF EDUCATION** | |
| **Carey M. Wright, Ed.D.**  State Superintendent of Education | |
| **Nathan Oakley, Ph.D.**  Chief Academic Officer | |
| **Wendy Clemons**  Executive Director, Office of Secondary  Education/Dropout Prevention & Professional Development | **Tenette Smith, Ed.D.**  Executive Director, Office of Elementary  Education and Reading |
| **Marla Davis, Ph.D.** State Director of Curriculum and Instruction | **Elise Brown**  Director of Online Professional Development  Mathematics Professional Development Coordinator (6-12) |
| **Tommisha Johnson** K-12 Mathematics Content Director | **Amy Pinkerton**  Mathematics Professional Development Coordinator (K-5) |

**Special Acknowledgements**

Bailey Education Group

The Kirkland Group

**INTRODUCTION**

The unprecedented, nationwide school closures in the spring of 2020 due to the COVID-19 pandemic have created a shift in how districts plan for school re-entry. Instead of the traditional brick-and-mortar planning, administrators are now identifying models that will support a variety of instructional delivery scenarios as they plan for school reopening. The traditional methods of planning and delivery are nearly impossible to implement as a stand-alone model; instead, innovative educators are developing and identifying strategies and resources to support a variety of distance learning scenarios as part of their plans. When using new models of delivery, it is important to recognize that the traditional approach to remediation—providing work better suited for earlier grades—may be insufficient. Instead, the conventional approach to remediation will likely compound the problem educators are trying to correct. According to a 2018 study, [The Opportunity Myth[[1]](#footnote-2)](https://tntp.org/assets/documents/TNTP_The-Opportunity-Myth_Web.pdf), the approach of “meeting students where they are”, while often well-intended, only widens the achievement gap. Instead of remediation, teachers and administrators are encouraged to look toward acceleration methods to support student growth and close the gaps.

**PURPOSE**

The purpose of the *Suggested Mississippi College- and Career-Readiness Standards Instructional Planning Guides* is to provide a *SUGGESTED* guide to assist teachers in planning rigorous, coherent lessons that focus on the critical content of each grade level. Providing curriculum guidance through intentional standard grouping and consideration for the time needed to address different objectives, should encourage consistent instruction that fully aligns to the Mississippi College- and Career-Readiness Standards. The use of this guide can also foster collaborative planning across schools and districts throughout the state.

**DEVELOPMENT**

The following planning and subsequent grouping of standards were determined through a collaborative process among state-level content specialists. By connecting standards through common conceptual understandings and relationships, the expectation is that conceptual connections will promote a cohesive process and avoid the teaching of standards in isolation. Additionally, it promotes a deeper understanding and a more authentic acquisition of mathematical knowledge and skills. The Standards for Mathematical Practices (SMPs) presented are those suggested to be highlighted within the respective standard; however, this does not exclude the inclusion of other SMPs. The standards determined as “**priority**” have been bolded and are standards identified as critical to the mastery of other standards. A standard’s “**priority**” status does *NOT* have a direct correlation with test item frequency. Additionally, some standards may appear multiple times throughout the course with a portion of the standard highlighted to depict that only that portion of the standard is to be taught within that unit.

**RESOURCES FOR CONSIDERATION**

The resources listed below may be referenced to support classroom teachers in the development of lesson plans and instruction at the local level. This list is not meant to be exhaustive, rather it represents consultative resources that align with the Units/Themes provided in the Instructional Planning Guides. Educators are encouraged to use these resources in addition to those curriculum materials that meet the needs of the students they serve.

| High-Quality Instructional Materials (HQIM) | Instruction and Planning Resources | Standards for Mathematical Practices (SMPs) | Assessment  Resources | Professional Development |
| --- | --- | --- | --- | --- |
| * [MS HQIM Defined](https://mdek12.org/HQIM) * [MS Adopted HQIM (Textbooks)](https://www.mdek12.org/caravan2019) * [enVision Mathematics 2020 Correlation to the MS CCRS K-5](https://assets.savvas.com/correlations/MS_2016_enVMS2020_K-5.pdf?_ga=2.245827716.1280125487.1593455317-1093477658.1593035292) * [MHE My Math Learning Solution](https://s3.amazonaws.com/ecommerce-prod.mheducation.com/unitas/school/explore/sites/mymath/mcgraw-hill-my-math-learning-solution.pdf) * [Great Minds (Eureka Math) Teacher Resource Pack](https://eurekamath.greatminds.org/teacher-resource-pack) * [Great Minds Alignment to MSCCRS](https://greatminds.org/resources/products/mississippi-standards-alignment-study) | * [Achieve the Core Coherence Map-2](https://achievethecore.org/coherence-map/2)[nd](https://achievethecore.org/coherence-map/2) [Grade Math](https://achievethecore.org/coherence-map/2) * [Standards Dependency and Flow View](http://jeffbaumes.github.io/standards/) * *Scaffolding Instruction for ELLs* * [Achieve the Core CCR Shifts in Mathematics](https://achievethecore.org/content/upload/SAP_ShiftsAtAGlance_02.pdf) * [Standards Progressions for Mathematics Progression Documents](http://ime.math.arizona.edu/progressions/) * [SFUSD Manipulatives List](http://www.sfusdmath.org/manipulatives.html) * [Printable Manipulatives](https://www.mathematicalpractices.com/mp1e/content/printable-manipulatives/) * [SFUSD Manipulatives List](http://www.sfusdmath.org/manipulatives.html) * [Printable Manipulatives](https://www.mathematicalpractices.com/mp1e/content/printable-manipulatives/) * [Achieve the Core Instructional Practice Guide K-8](https://achievethecore.org/category/1155/printable-versions) * [Mississippi Exemplar Units and Lesson Plans-Grade 2 Math](https://www.mdek12.org/sites/default/files/documents/OAE/OEER/Exemplar%20Units/math/2nd-Grade-Math-Unit_20181126.pdf) * [Mississippi CCRS Exemplar Lesson Plans](https://mdek12.org/ESE/math/lesson-plans) * [HCPSS Family Mathematics Support Center-Grade 2](https://hcpss.instructure.com/courses/34428/pages/grade-2-star-mathematics-overview) * [MS CCRS Scaffolding Documents](https://mdek12.org/ese/ccr) * [Access for All Guidance](https://mdek12.org/sites/default/files/documents/OAE/OAE/2019-access-for-all-guide.pdf) * [MDE Family Guides for Student Success](https://mdek12.org/OAE/OEER/FamilyGuidesEnglish)\*   (Alternative Language: [Spanish](https://mdek12.org/OAE/OEER/FamilyGuidesSpanish))  *\*This resource can be used for standards reinforcement of previous grades.* | * [Illustrative Mathematics Understanding the Standards for Mathematical Practices (SMPs)](http://tasks.illustrativemathematics.org/practice-standards/) * [Inside Mathematics Mathematical Practice Standards](https://www.insidemathematics.org/common-core-resources/mathematical-practice-standards) * [Inside Mathematics Mentors of Mathematical Practice](https://www.insidemathematics.org/common-core-resources/mentors-of-mathematical-practice) | * [Inside Mathematics Performance Tasks 2-HS](https://www.insidemathematics.org/performance-assessment-tasks) * [Illustrative Mathematics Grade 2 Tasks](http://tasks.illustrativemathematics.org/content-standards/2) * [Goalbook Pathways Grade 2](https://goalbookapp.com/pathways/?ref=topic" \l "!/browse-topics/math/2) * [Khan Academy Grade 2](https://www.khanacademy.org/math/cc-2nd-grade-math) | * [MDE Professional Development Resources](https://www.mdek12.org/OPD/home) * [MARS Prototype Professional Development Modules](https://www.map.mathshell.org/pd.php) * [NCTM Professional Development Resources](https://www.nctm.org/Conferences-and-Professional-Development/Professional-Development-Resources/) * [Inside Mathematics Classroom Videos](https://www.insidemathematics.org/classroom-videos) * [NCTM Math Forum](https://www.nctm.org/tmf/mathed/mathed.research.new.html) * [Great Minds (Eureka) Webinars](https://eurekamath.greatminds.org/webinar-library) * [Using Manipulatives in the Classroom](https://www.teachervision.com/professional-development/using-manipulatives) |
| Applets, Demos, Interactives, and Virtual Manipulatives | | | | |
| * [CPM Tiles](https://technology.cpm.org/general/tiles/) * [Didax Virtual Manipulatives](https://www.didax.com/math/virtual-manipulatives.html) * [Didax Free Activity Guides for Virtual Manipulatives](https://www.didax.com/virtual-manipulatives-activities) * [GeoGebra Virtual Manipulatives](https://www.geogebra.org/m/NPDu3rCm) * [Houghton Mifflin and Harcourt iTools](https://www-k6.thinkcentral.com/content/hsp/math/hspmath/na/common/itools_int_9780547584997_/main.html) * [Math Playground Math Manipulatives](https://www.mathplayground.com/math_manipulatives.html) * [McGraw Hill (Glencoe) Virtual Manipulatives](http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html) * [The Math Learning Center Math Apps](https://www.mathlearningcenter.org/apps) * [Toy Theatre Virtual Manipulatives](https://toytheater.com/category/teacher-tools/virtual-manipulatives/) * [Visnos Mathematical Demonstrations](https://www.visnos.com/demos) | | | | |

| **TERM 1**  **UNIT OF STUDY**  (REAL-WORLD APPLICATION) **q** | **MS CCR STANDARDS q** | **STANDARDS FOR MATHEMATICAL  PRACTICE (SMPs) q** | CORE ACADEMIC **VOCABULARY TERMS q** |
| --- | --- | --- | --- |
| **Unit 1: Understanding Value and Counting to 1000: Counting by 5s.** (Expanding on the Grade 1 skill of counting to 120 and skip counting by 2s, allows students to understand numbers to represent a value and the sequence as it increases from 0-1000. Understanding 0-1000 will build the concept for understanding the repeat of number sequence in each place value.) | **2.NBT.2 Count within 1000; skip-count by 5s starting at any number ending in 5 or 0. Skip-count by 10s and 100s starting at any number.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Count  Hundreds  Ones  Order  Sequence  Sequential Order  Skip-Count  Tens  Thousand  Value  Zero -One Thousand |
| **Unit 2: Odd versus Even**  (As an addition to students learning and understanding number values, students learn of even and odd values. This skill becomes necessary when estimating sums, differences, products, and quotients.) | | 2.OA.3 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 number as a sum of two equal addends. | * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Even  Odd |
| **Unit 3: Fluently Adding and Subtracting within 20** (After working with place value and number properties, and solving word problems within 20 in Grade 1, students are ready to build fluency when adding and subtracting within 20. This skill lays the foundation for students adding and subtracting 3- and 4-digit numbers.) | | **2.OA.2 Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. \*\*** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Add  Altogether  Both  Combined  Decrease  Difference  Fewer  Fewer Than  How Many More  How Much More  In All  Increase  Minus  Plus  Remains  Sum  Take Away  Together  Total |
| **Unit 4: Arrays & Area** (As students learn the addition concept of Arrays, they can build on this skill by determining area of a rectangle by adding unit squares. This can be used as an extension to skip counting by 5s and an introduction to the multiplication concept.) | | 2.OA.4 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. | * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Addend  Array  Column  Group  Row  Skip-Count  Sum |
|  | | 2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. | * **SMP 4** Model with Mathematics. * **SMP 7** Look for and make use of structure. | Addend  Area  Array  Column  Group  Length  Row  Skip-Count  Square Unit  Sum  Width |

| **TERM 2**  **UNIT OF STUDY**  (REAL-WORLD APPLICATION) **q** | **MS CCR STANDARDS q** | **STANDARDS FOR MATHEMATICAL  PRACTICE (SMPs) q** | CORE ACADEMIC **VOCABULARY TERMS q** |
| --- | --- | --- | --- |
| **Unit 5: Partitioning a Calendar Year** (Building on the Grade 1 concept of partitioning a month, students expand this knowledge to the entire year.) | 2.MD.8b Fluently use a calendar to answer simple real world problems such as “How many weeks are in a year?” or “James gets a $5 allowance every 2 months, how much money will he have at the end of each year?” | * **SMP 1** Make sense of problems and persevere in solving them. * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 8** Look for and express regularity in repeated reasoning. | April  August  Calendar  Day  December  February  Friday  Hour  January  July  June  May  March  Minute  Monday  Month  November  October  Saturday  September  Sunday  Tuesday  Thursday  Wednesday  Week  Year |
| **Unit 6: Partitioning Shapes: Halves, Thirds, Fourths, and Quarters** (Continued from Grade 1, students are building a foundation for working with Fractions. Using a familiar concept such as shapes, students learn to create equal parts within a whole. The actual term “Fraction” does not appear until Grade 3. Prior to Grade 3, it is referred to as partitioning.) | 2.G.3 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. | * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 6** Attend to precision. * **SMP 8** Look for and express regularity in repeated reasoning. | Circle  Equal Part  Fourths  Half  Halves  Part  Partition  Quarter  Rectangle  Share  Third |
| **Unit 7: Polygons and Cubes**  (While working with shapes, students learn the attributes that make each one unique of the others. This is a foundational skill that lays the groundwork for more complex geometry skills in grades 3-8.) | 2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.5 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. \*\*\*\* | * **SMP 2** Reason abstractly and quantitatively. * **SMP 6** Attend to precision. * **SMP 8** Look for and express regularity in repeated reasoning. | Angle  Attribute  Closed  Circle  Cube  Equal  Face  Hexagon  Open  Pentagon  Quadrilateral  Rectangle  Shape  Side  Sphere  Square  Trapezoid  Triangle |
| **Unit 8: Measurement in Standard Unit** (Extending from non-standard measurement in Grade 1, students begin working with standard units of length using a ruler. This also lays the groundwork for fractions as they will be working with partitioning a number line.) | **2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.** | * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. * **SMP 7** Look for and make use of structure. | Centimeter  Foot  Inch  Length  Measuring Tape  Meter  Meter Stick  Ruler  Yard  Yardstick |
|  | **2.MD.2 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.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. * **SMP 7** Look for and make use of structure. | Centimeter  Foot  Inch  Length  Measuring Tape  Meter  Meter Stick  Ruler  Yard  Yardstick |
|  | **2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.** | * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. | Centimeter  Foot  Inch  Length  Meter |
|  | **2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard-length unit.** | * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. * **SMP 7** Look for and make use of structure. | Centimeter  Foot  Inch  Length  Meter  Yard |
| **Unit 9: Representing Data**  (Students continue learning to group data in representations such as line plots and bar graphs.) | 2.MD.9 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. | * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. * **SMP 8** Look for and express regularity in repeated reasoning. | Bar Graph  Horizontal Scale  Line Plot  Unit Scale  Vertical Scale |
|  | 2.MD.10 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. | * **SMP 1** Make sense of problems and persevere in solving them. * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. * **SMP 8** Look for and express regularity in repeated reasoning. | Bar Graph  Picture Graph  Unit Scale |

| **TERM 3**  **UNIT OF STUDY**  (REAL-WORLD APPLICATION) **q** | **MS CCR STANDARDS q** | **STANDARDS FOR MATHEMATICAL  PRACTICE (SMPs) q** | CORE ACADEMIC **VOCABULARY TERMS q** |
| --- | --- | --- | --- |
| **Unit 10: Understanding Value and Counting to 1000: Counting by 5s and 10s.** (Expanding on the Grade 1 skill of counting to 120 and skip counting by 2s, allows students to understand numbers to represent a value and the sequence as it increases from 0-1000. Understanding 0-1000 will build the concept for understanding the repeat of number sequence in each place value.) | **2.NBT.2 Count within 1000; skip-count by 5s starting at any number ending in 5 or 0. Skip-count by 10s and 100s starting at any number.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Count  Hundreds  Ones  Order  Sequence  Sequential Order  Skip-Count  Tens  Thousand  Value  Zero -One Thousand |
|  | **2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Expanded Form  Hundreds  Ones  Place Value  Standard Form  Tens  Thousand  Value  Zero -One Thousand |
| **Unit 11: Tell and Write Time to the Nearest 5 Minutes**  (Keeping in line with the concept of partitioning, students expand learning the parts of an hour and a clock. They use this knowledge to accurately tell time to the nearest five minutes. Telling time to the nearest 5 minutes builds on the ability to skip count by 5s.) | 2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. | * **SMP 5** Use appropriate tools strategically. * **SMP 6** Attend to precision. | A.M.  About  Clock  Half-Hour  Hour  Hour Hand  O’ Clock  Minute  Minute Hand  P.M.  Quarter  Time |
| **Unit 12: Measuring Within 100**  (After building fluency with addition and subtraction within 20 and understanding measurement. Students are now ready to combine these concepts to begin building to 100 through context.) | **2.MD.5 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.** | * **SMP 1** Make sense of problems and persevere in solving them. * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 8** Look for and express regularity in repeated reasoning. | Add  Altogether  Both  Combined  Decrease  Difference  Fewer  Fewer Than  How Many More  How Much More  In All  Increase  Minus  Plus  Remains  Sum  Take Away  Together  Total |
|  | **2.MD.6 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.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. | Number Line  Diagram |
| **Unit 13: The Dollar Bill: Adding Within 100**  (Foundational skill expanding from Grade 1, students continue with learning the concept of money, starting with the Dollar and the coins that make up a dollar. This builds on the concept of adding to 100. It lays the foundation for working with money, decimals, fractional parts, and equal parts.) | 2.MD.8a 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? | * **SMP 1** Make sense of problems and persevere in solving them. * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 8** Look for and express regularity in repeated reasoning. | Add  Altogether  Both  Cents  Combined  Decrease  Difference  Dimes  Dollar  Fewer  Fewer Than  How Many More  How Much More  In All  Increase  Minus  Nickels  Pennies  Plus  Quarters  Remains  Sum  Take Away  Together  Total |
| **Unit 14: Fluently Add and Subtract Within 100** (Students use their knowledge of working with place value and number properties from Grade 1 to expand knowledge from adding and subtracting within 10 and 20 to adding and subtracting within 100.) | **2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Addend  Difference  Expanded Form  Hundreds  Minuend  Ones  Regroup  Standard Form  Subtrahend  Sum  Tens  Thousands  Zero-One Thousand |
| **Unit 15: Solve Word Problems Involving Additions and Subtraction Within 100**  (After working with the computation of adding and subtracting within 100, students are ready to expand knowledge by applying knowledge to real-world situations. This lays the foundation for students to be able to apply mathematical computations to a real-world problems or situations.) | **2.OA.1 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. \*** | * **SMP 1** Make sense of problems and persevere in solving them. * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 8** Look for and express regularity in repeated reasoning. | Add  Altogether  Both  Combined  Decrease  Difference  Fewer  Fewer Than  How Many More  How Much More  In All  Increase  Minus  Plus  Remains  Sum  Take Away  Together  Total |

| **TERM 4**  **UNIT OF STUDY**  (REAL-WORLD APPLICATION) **q** | **MS CCR STANDARDS q** | **STANDARDS FOR MATHEMATICAL  PRACTICE (SMPs) q** | CORE ACADEMIC **VOCABULARY TERMS q** |
| --- | --- | --- | --- |
| **Unit 16: Understanding Value and Counting to 1000: Counting by 5s, 10s, and 100s.** (Expanding on the Grade 1 skill of counting to 120 and skip counting by 2s, allows students to understand numbers to represent a value and the sequence as it increases from 0-1000. Understanding 0-1000 will build the concept for understanding the repeat of number sequence in each place value.) | **2.NBT.2 Count within 1000; skip-count by 5s starting at any number ending in 5 or 0. Skip-count by 10s and 100s starting at any number.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Count  Hundreds  Ones  Order  Sequence  Sequential Order  Skip-Count  Tens  Thousand  Value  Zero -One Thousand |
|  | **2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Expanded Form  Hundreds  Ones  Standard Form  Tens  Thousands  Zero-One Thousand |
|  | **2.NBT.1 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:**  **2.NBT.1a 100 can be thought of as a bundle of ten tens — called a “hundred.” 2.NBT.1b 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).** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Hundreds  Ones  Place Value  Tens  Thousands |
| **Unit 17: Comparing 3-Digit Numbers** (Students build on knowledge of sequence and place value to determine which three-digit number has the greater value. Prepares students with a method for comparing larger quantities and decimals in later grades.) | **2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 6** Attend to precision. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Compare  Equal To (=)  Greater Than (>),  Hundreds  Less Than (<)  Ones  Tens |
| **Unit 18: Adding with Place Value**  (Expanding on knowledge from Grade 1 with ones and tens, students use place value to understand the concept of 1000. By relating addition to the rules of ones and tens, students begin to add and subtract 100s as they would ones.) | **2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Hundreds  Ones  Place Value  Regrouping  Tens  Thousands |
|  | **2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. \*\*\*** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 3** Construct viable arguments and critique the reasoning of others. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Hundreds  Ones  Place Value  Regrouping  Tens  Thousands |
| **Unit 20: Adding and Subtracting Within 1000 Using Multiple Strategies**  (Expanding on knowledge from Grade 1 with ones and tens, students use multiple mental strategies to understand the concepts of 1000. By relating addition to the rules of ones and tens, students begin to add and subtract 100s as they would ones.) | **2.NBT.7 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.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 4** Model with Mathematics. * **SMP 5** Use appropriate tools strategically. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Hundreds  Ones  Place Value  Regrouping  Tens  Thousands |
|  | **2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.** | * **SMP 2** Reason abstractly and quantitatively. * **SMP 7** Look for and make use of structure. * **SMP 8** Look for and express regularity in repeated reasoning. | Hundreds  Ones  Place Value  Regrouping  Tens  Thousands |

***\****[**See Glossary, Table 1**](http://www.corestandards.org/Math/Content/mathematics-glossary/Table-1/)***.***

***\*\*See standard 1.OA.6 for a list of mental strategies.***

***\*\*\*Explanations may be supported by drawings or objects.***

***\*\*\*\*\*Sizes are compared directly or visually, not compared by measuring.***

1. *https://tntp.org/assets/documents/TNTP\_The-Opportunity-Myth\_Web.pdf* [↑](#footnote-ref-2)