Mississippi Mathematics Manipulatives Manual
Featured Activity

"Counting Bears-How Many Objects?"

(Based on the Book "Bear Counts", by Karma Wilson)

K.CC.4b & K.CC.4c

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As we continue our efforts to develop high-quality instructional materials (HQIM) and resources, the Mississippi Department of Education (MDE), through the Academic Education Office, would like to showcase instructional practices and activities that foster conceptual understanding through the use of manipulatives in the mathematics classroom.

The **Mississippi Mathematics Manipulatives Manual** features activities meant to serve as short, hands-on procedures that may be implemented before, during, or after a lesson to support the teaching and learning process of the Mississippi College- and Career-Readiness Standards (MCCRS) for Mathematics. Alignment with the MCCRS Scaffolding Document has been included for additional support. Teachers may contact staff at the MDE if they would like to borrow manipulatives for classroom use.
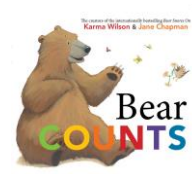
Teachers may modify these activities to meet the needs of the students they serve and their instructional delivery model (virtual, in-person, or hybrid).

Special Thanks:
Carol Ladner, M.A.T.
Gulfport School District

Counting Bears-How Many Objects?

MANIPULATIVE(S):

- Counting Bears
- "Bear Counts" by Karma Wilson

GRADE LEVEL OR COURSE TITLE:

CCR Mathematics Grade K

DOMAIN AND CLUSTER HEADING:

Counting and Cardinality (CC):

Count to tell the number of objects

STANDARD(S):

K.CC.4: Understand the relationship between numbers and quantities; connect counting to cardinality.

> **K.CC.4b**: 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.
>
> **K.CC.4c**: Understand that each successive number name refers to a quantity that is one larger.

PREREQUISITE SKILLS:

1. Know how to recite numbers 1 to 30 in the correct order.
2. Know the sequential aspect of counting (i.e., 1 comes before 2, 2 comes before 3, etc.)
3. Know how to count a group of 10 arranged objects and 7 scattered objects.

ACTIVITY: Note: Activity Sheets Attached

1. Ensure students have access to counting bears of assorted colors and Activity Sheet 1 that corresponds to the book, "Bear Counts". (**Note:** Counting Bears, a virtual manipulative by Toy Theater, is included in the Resource section below.)
2. Read the book "Bear Counts" by Karma Wilson to the students. (**Note:** A Read Aloud is included in the resources section.)
3. Have students follow along with Bear in the story and place counting bears in the designated place on Activity Sheet 1 as Bear counts. (**Note:** See Activity Sheet 1-Completed Example for reference.)
4. After counting to five in the story and associating the number name to the counted objects, provide students with 11 counting bears of the same color, and four counting bears of another color *(Example: 11 blue counting bears and 4 red counting bears),* and Activity Sheet 2.
5. Review with students the concept of one larger.

6. Have the students use the 11 same colored counting bears to complete the following steps on Activity Sheet 2.
   a. Direct the students to place one bear on the bear outline in row 1.
   b. Direct the students to place one bear on the bear outline in row 2.
   c. Direct the students to place two bears on the bear outline in row 3.
   d. Direct the students to place three bears on the bear outline in row 4.
   e. Direct the students to place four bears on the bear outline in row 5.
7. Ask students to discuss what they notice about the pattern forming by the rows.
8. Now have students to use the four same colored counting bears to complete the pattern on Activity Sheet 2 and identify the value that is one greater than modeled for rows 2 through 5. (***Note:*** See Activity Sheet 2- Completed Example for reference.)
9. Discuss with students how each row shows that each successive number name refers to a value of one greater.

QUESTIONS TO CONSIDER:

- What does the number three (3) mean when counting objects?
- How does three (3) objects compare to five (5) objects?
- How would you display two and one more?

RESOURCES:

- Mississippi Mathematics Scaffolding Document (Grade K, Pages 5-6)
- 2016 MCCRS for Mathematics
- Bear Counts by Karma Wilson -Read Aloud by Reading Library Books
- Counting Bears- Toy Theater -Virtual Manipulative

Optional: The University of Mississippi's Center for Mathematics and Science Education has an extensive inventory of math (and science and technology) tools and manipulatives that teachers may borrow for classroom use at no charge. Click the link below to access the inventory list and complete a check-out request.

- CMSE Manipulatives

BEYOND THE ACTIVITY:

- **Assessment(s):** Formative Assessment: Ask students to represent the number name 4 as three and one more using two different colored bears. Do additional examples like this up to ten.
- **Extension(s):** Students that have grasped the concept of one more can write addition statements for each row on Activity Sheet 2. This will assist with the mastery of standards K.OA.1 and 1.OA.1.
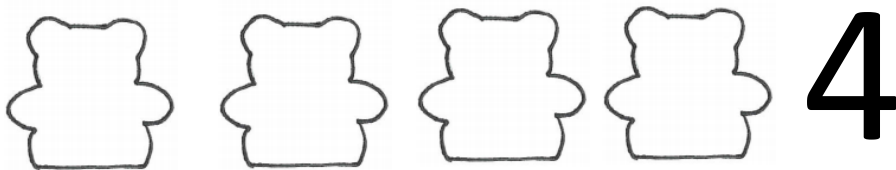
1!

1, 2!

1, 2, 3!

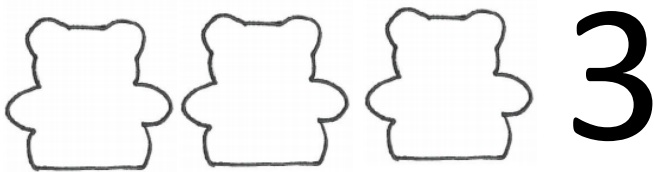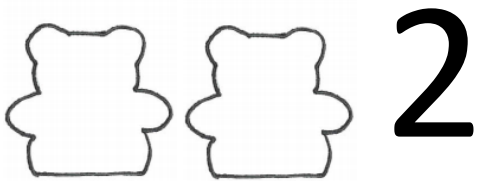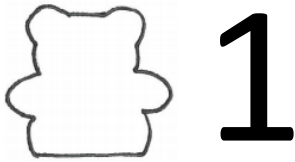# 1, 2, 3, 4!

1, 2, 3, 4, 5!

Activity Sheet 1
Counting Bears- *Completed Example*

Activity Sheet 2
Counting Bears

1

2

3

4

5

Activity Sheet 2
Counting Bears- *Completed Example*

 1

 2

 3

 4

 5