



MISSISSIPPI
EXEMPLAR
Units & Lessons
MATHEMATICS

Pre-Kindergarten

Grant funded by:



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P.O. Box 771 | Jackson, MS | 39205-0771
Tel (601) 359-2586
www.mde.k12.ms.us
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MISSISSIPPI DEPARTMENT OF EDUCATION

359 North West Street, Suite 203

Jackson, Mississippi 39201

(601) 359-3511

Lesson 9: Run Mice, Run!

Focus Standard(s): PK.OA.1, PK.OA.2

Additional Standard(s): PK.RL.1, PK.CC.2, PK.CC.3, PK.CC.4

Lesson Activity Materials:

- Clothespins with numbers 0-10 on them (duplicate numbers as needed)
- Jar
- *Mouse Count* by Ellen Stohl Walsh
- Play-Doh snake
- Pompoms for mice
- White board/Smartboard

Learning Center Materials:


- Markers
- Play-Doh and baking trays/cookie sheets
- Popsicle Sticks and glue sticks
- Sequencing puzzles
- Various art supplies (for props)
- Mouse Count Animated Story: https://www.youtube.com/watch?v=xtoB_x1O5YI

Lesson Target:

- Students will understand addition as putting together and adding to and understand subtraction as taking apart and taking from.

Guiding Question(s):

- How can I show an amount using different combinations of the same objects?
- How can I add on to make more? How can I take away to make less?

Vocabulary	
<p>Academic Vocabulary:</p> <ul style="list-style-type: none"> • Add • Subtract • Total <p>Note: Expose students to various ways to mathematically express these terms. For example, when discussing the word subtract, include phrases such as take away, take from, and how many are left.</p>	<p>Instructional Strategies for Academic Vocabulary:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Introduce words with student-friendly definitions and pictures <input type="checkbox"/> Model how to use the words in discussion <input type="checkbox"/> Discuss the meaning of word in a mathematical context <input type="checkbox"/> Create pictures/symbols to represent words <input type="checkbox"/> Write/discuss using the words
<p>Direct Instruction Text Vocabulary:</p> <ul style="list-style-type: none"> • Enough • Empty • Greedy • Hungry • Jar • Mice • Snake <p>Note: Consider which of these words would fall into Tier 2 for your students when introducing vocabulary.</p>	<p>Instructional Strategies for Direct Instruction Text Vocabulary:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Introduce words with student-friendly definition and pictures <input type="checkbox"/> Model how to use the words in discussion <input type="checkbox"/> Write/discuss the meaning of word in multiple contexts <input type="checkbox"/> Provide pictures/props to represent words <input type="checkbox"/> Act out the words or attach movements to the words
Symbol	Type of Text and Interpretation of Symbol
	Instructional support and/or extension suggestions for students who are EL, have disabilities, or perform well below the grade level and/or for students who perform well above grade level
✓	Assessment (Pre-assessment, Formative, Self, or Summative)

Instructional Plan

Understanding Lesson Purpose and Student Outcomes: Students will understand the relationship between adding and subtracting using developmentally appropriate materials.

Anticipatory Set/Introduction to the Lesson: Think-Pair-Share (Whole Group)

Note: Before the activity begins, distribute a clothes pin to each student with a number or representation of 1-10 written on it.

As partners, students will retell the story, *Mouse Count*. Have students use story elements and unit vocabulary as the story is retold.

Guide the activity by encouraging students to:

- **Think** about the story by yourself with no talking.
- **Pair** by finding your Mouse Match number partner. (Use clothes pin to find a person with the same number or representation of the number.)
- **Share** with your partner your favorite part of the story (adding on or taking from).
- Allow 2-3 partners to share with the whole group.

Introduce the minus sign (-) and what it means along with reviewing the equal sign (=).

Note: (1) Struggling students are placed near the presenter or assistant, who occasionally redirects the students' attention during whole group and small group activities. (2) Whole Group should last between 15-20 minutes. If this time frame is too long for students, the Whole Group activities may be divided into two sessions. (3) Small Group should last approximately 15 minutes. Using the pre-assessment results, design the formation of small groups to reflect student capability and to drive the instruction throughout every lesson.

For students who are EL, have disabilities, or perform well below grade level:

- Students are placed with peers to receive support.
- Students continue to practice adding on 0-5 mice until students can master the skill.

Extensions for students with high interest or working above grade level:

- Students may add and subtract mice from the jar using 10 mice.
- Students can write the numerals to represent how many.
- Students are given scenarios using larger numbers (0-10).

Activity 1: Taking Away Mice (Teacher-led Small Group)

Note: Insert movement/physical activity for the students between the Anticipatory Set and Activity 1.

Demonstrate taking mice out of the jar using pompoms (mice), a jar, and a Play-Doh snake. Starting with 5, pause after each “mouse” is taken from the jar to question students:

T: How many mice are left in the jar?

S: Respond with the correct amount.

For example: There are 4 mice in the jar. Take away (subtracts) 2 and ask, “how many mice are left in the jar?” Students will respond, “2”. Reinforce the answer by stating, “4 mice minus 2 mice equals 2 mice.” As the amounts decrease, students may need to pour out the mice or place them on the table to be able to count with precision.

Continue the lesson and observe, allowing student opportunities to be the snake and count mice taken from the jar and ask peers, “How many...?”

Learning Centers

Note: Learning Centers are designed to be developmentally appropriate for all students. The teacher and teacher assistant move about to observe and offer support, as needed. Learning centers will operate in conjunction with small group.

- ✓ **Writing Center** – Ask students to write and/or draw about their favorite animals. Have students reference the Word Wall, available books, charts and pictures in the classroom.
- ✓ **Dramatic Play Center** - Have students create their own props for *Mouse Count* out of various art materials and act out the story.
- ✓ **Math Center** - Using playdough, have students make snakes and mice, count them, and make the number for the amount.
- ✓ **Computer/Listening Center** – Provide technology for students to listen to *Mouse Count* on CD, DVD, or online with [Mouse Count Animated Story](#). If listening to the story on CD, the student will use the text to follow with the reader.
- ✓ **Reading Center** – Allow students to select fiction and non-fiction books about mice, snakes, counting, adding, and subtracting to read, pretend read, and view.
- ✓ **Manipulative/Block Center** - Students will work with sequencing puzzles and counting puzzles.

Reflection and Closing (Whole Group):

Allow students to act out adding on and taking away using props in the classroom. Ask students to explain the addition or subtraction process. Use names of students in the classroom to substitute for names in the reading problems below. After each

answer is given reinforce the answer by stating the problem in an equation format using the words and/or symbols plus, minus, add, subtract, and equal.

- Jim has 3 pencils. Sam gives him 2 more. How many pencils does Jim have now?
- Lisa brought 2 bags of chips to school for snack. Lisa gave 1 bag to Kim. How many bags does Lisa have left?
- Bob, Pat, Matt and Mary are wearing blue shirts. Ann comes to school late and she's wearing a blue shirt too. How many students are wearing blue shirts?

Create more addition and subtraction scenarios as time permits. This activity can be continued during transition times (lining up, lunch time, snack time, dismissal, etc.)

Reflect on how well the students answered the following essential questions by examining evidence of student learning:

- How can I add on to make more? How can I take away to make less?

Homework

Homework is not developmentally appropriate for pre-kindergarten.

For training or questions regarding this unit,
please contact one of the following:

Wendy Clemons
Professional Development Director
Wclemons@mdek12.org

Elise Brown
Math Professional Development Coordinator
elise.brown@mdek12.org

Kristina Livingston
Professional Development Coordinator, Lead
klivingston@mdek12.org