

TEACHER NAME: _____ Jasmine Saechao _____ SETTING: _____ 3rd Grade Classroom _____ DATE: _____ Nov 19, 2022 _____
UNIT: Operations and Algebraic Thinking _____
LESSON TITLE: Introducing Multiplication _____
____X____ WHOLE GROUP _____ SMALL GROUP _____ INDIVIDUAL (1:1) _____ OTHER: *explain* _____

UNIVERSAL LESSON PLAN

WHAT

What is being taught?

LEARNING GOAL:

Students will be able to solve multiplication problems with products 100 and below, by practicing with multiple forms of representations, in order to solve at a 80% accuracy after a week of practice.

[California Common Core State Standards: Mathematics](#)

STANDARD(S):

CCSS 3.0A: OPERATIONS AND ALGEBRAIC THINKING

CCCS 3.0A1 Interpret whole numbers, e.g. interpret 5×7 as the total numbers of objects in 5 groups of 7 objects each.

CCCS 3.0A3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement qualities.

IEP GOAL(S): *list applicable IEP goals as they apply to the lesson.*

Student will be able to draw pictures for the multiplication representation. The student by the end of the week, will be able to compute the answers to multiplication problems at 50% accuracy, but will try to draw pictures for 90% of the problems.

WHY

Why is this lesson being taught?

RELEVANCE: Multiplication has a real presence in everyday life. Right now, we add things together to find the total. In many cases, we can use a multiplication problem to solve counting problems, especially involving groups or rows. Can you imagine not having to count all twenty chairs in a room, but just having to count the number or rows and how many chairs in each row? Then, you'd know the answer, because of multiplication.

RATIONALE - PRIOR KNOWLEDGE: Do y'all remember us learning skip counting, addition, and how to use the number line? All of those are going to be used to help us show multiplication understanding.

HOW

How is this lesson being taught and assessed?

BEHAVIORAL EXPECTATIONS:

- Students will be expected to listen and participate in the lesson.
- Students will be expected to respect each other's spaces and materials, including white boards and markers.
- Students are expected to try. They will not be graded on knowing the material right off the bat, but they are expected to try their best at retaining and using the information about multiplication.

ACADEMIC LANGUAGE: *bullet and define lesson vocabulary - included in the lesson sequence.*

- Array: *an ordered arrangement*
- Skip counting: *the method of counting forward by numbers other than 1*
- Equal Groups: *arranging numbers into piles/circles of equal amounts of the same number*
- Product: *The answer to a multiplication problem*

MATERIALS: *list materials required for the lesson.*

- PowerPoint presentation with example multiplication problems
- White boards and markers for each individual student
- White board or smart board for the teacher to display the answers to the class
- Handout, as described in lesson, and pencils

ACCOMMODATIONS, MODIFICATIONS & UDL CONSIDERATIONS:

- Students can use beans or counters, by arranging them in the necessary arrangement to represent multiplication if writing on a whiteboard is not accessible
- Students can verbally express the multiplication representation if using hands and arms is not accessible
- Students can watch the lesson from a more comfortable place, like the rug
- Students can receive a fidget in order to help them pay attention the class lesson

CO-TEACHING AND/OR PARAPROFESSIONAL SUPPORT (IF APPLICABLE): *describe co-teaching strategies and/or the roles and responsibilities of paraprofessionals during the lesson.*

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LESSON SEQUENCE: *sequentially list lesson implementation steps – describe how students will engage throughout the lesson.*

REVIEW BEHAVIORAL EXPECTATIONS PRIOR TO LESSON!

INTRODUCTION	<p><i>Learning Goal.</i> Hello, today we will be learning what multiplication is! It is also called “times” and it is shown with an x. After the lesson, we will be able to do multiplication by drawing a variety of pictures to help us!</p> <p><i>Relevance.</i> Multiplication has a real presence in everyday life. Right now, we add things together to find the total. In many cases, we can use a multiplication problem to solve counting problems, especially involving groups or rows. Can you imagine not having to count all twenty chairs in a room, but just having to count the number or rows and how many chairs in each row? Then, you’d know the answer, because of multiplication.</p> <p><i>Rationale - Activate Prior-Knowledge –</i> Do y’all remember us learning skip counting, addition, and how to use the number line? All of those are going to be used to help us show multiplication understanding. Skip counting can be used to find the answer to a multiplication problem. We can show skip counting on number line to also help us. Like skip counting, repeated addition is another way to represent multiplication.</p>	TIME 5:00														
INSTRUCTIONAL SEQUENCE	<p><i>Academic Language –</i> There will be a hand out to help them learn the academic language. The first section will include a multiplication problem written numerically. (e.g. $5 \times 2 = 10$). The second section will say equal groups, followed by array, number-line, repeated addition, and skip counting. These will be filled out in the handout as we work through the lesson.</p> <p><i>Procedure - sequentially list lesson implementation steps. Instructional Strategies & SDAIE Strategies</i></p> <table><tr><th><u>WHAT WILL THE TEACHER DO?</u></th><th><u>WHAT WILL THE STUDENTS DO?</u></th></tr><tr><td>First, the teacher will label the parts of the written out problem, explaining what the multiplication symbol is, as well as what a product is.</td><td>Student will label multiplication symbol and 10 as the quotient.</td></tr><tr><td>Then, I will model the equal groups, by creating 5 big circles. I will ask the students how many dots they think should go in each circle.</td><td>Then, the students will be copying the equal groups, and participating by answering questions. Students will be able to connect this model to the associated answer.</td></tr><tr><td>Next, I will go over an array example, of 5 rows with 2 in each row. I will ask the class, “What do you think the total of circles in this array is?”</td><td>Next, the students will draw the array, as modeled by the teacher. The students will also answer the question.</td></tr><tr><td>This will be repeated with the same problem, with displays showing number-line use, repeated addition, and skip counting.</td><td>The students will continue the same engagement through the remaining representations for multiplication.</td></tr><tr><td>After the review of terms, we will work through word problems together as a class. The teacher will read aloud the problem, then ask for a volunteer to suggest a representation model for this problem.</td><td>The students will have their white boards and markers ready to show answers to the teacher, but first they will listen quietly at their desks. They will raise hands to offer the representation model.</td></tr><tr><td>Then the teacher will ask the students to solve that multiplication problem using the suggested representation model.</td><td>Students will use their white boards and markers to solve the problem: showing the representation model and the answer</td></tr></table>	<u>WHAT WILL THE TEACHER DO?</u>	<u>WHAT WILL THE STUDENTS DO?</u>	First, the teacher will label the parts of the written out problem, explaining what the multiplication symbol is, as well as what a product is.	Student will label multiplication symbol and 10 as the quotient.	Then, I will model the equal groups, by creating 5 big circles. I will ask the students how many dots they think should go in each circle.	Then, the students will be copying the equal groups, and participating by answering questions. Students will be able to connect this model to the associated answer.	Next, I will go over an array example, of 5 rows with 2 in each row. I will ask the class, “What do you think the total of circles in this array is?”	Next, the students will draw the array, as modeled by the teacher. The students will also answer the question.	This will be repeated with the same problem, with displays showing number-line use, repeated addition, and skip counting.	The students will continue the same engagement through the remaining representations for multiplication.	After the review of terms, we will work through word problems together as a class. The teacher will read aloud the problem, then ask for a volunteer to suggest a representation model for this problem.	The students will have their white boards and markers ready to show answers to the teacher, but first they will listen quietly at their desks. They will raise hands to offer the representation model.	Then the teacher will ask the students to solve that multiplication problem using the suggested representation model.	Students will use their white boards and markers to solve the problem: showing the representation model and the answer	TIME 20:00
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	<p><i>Supports.</i></p>			
CLOSURE	<p><i>Learning Goal - Assessment.</i> <i>The exit ticket could be to solve a couple questions on their white boards, independently. Once done with the problems, they will take the answers to the teacher's desk for assessment. If all correct, they will move on. If there is small errors, then the teacher will instruct them on how to fix the problem, and try again with one last problem. If there are major issues of understanding the material, the student may need to move onto Tier 2 work in this subject.</i></p> <p><i>Relevance.</i> <i>The students will be able to see multiplication in the real world. An example could include the number of desks in the classroom, using equal groups or array, depending if they are in rows or groups.</i></p> <p><i>Lesson Summary.</i> <i>The introduction to multiplication is shown by connecting it to concepts the student already understands, such as addition, groups, and number-lines. These connections help the students understand multiplication, while being introduced to other means of representation, such as multiplication. The student will see multiplication as it relates to the real world.</i></p>	TIME		

DEMONSTRATION OF LEARNING: *describe how students will demonstrate their learning - outline how student learning will be assessed against the learning goal and describe how students will receive and review feedback.*

- **Student is able to show the different types of representations for multiplication.**
- **Students will be able to come to the conclusion of the correct answer, based on the representation model.**
- **Students will be able to grab needed information from word problems in order to solve the multiplication problem.**
- **ASSESSMENT FEEDBACK & REVIEW**

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- If majority of students are retaining the information and able to solve multiplication problems correctly, no change to Tier 1 instruction will be needed. If there are less than 80% of students proficient in the material, then there will need to be changes made in instruction.

This UNIVERSAL LESSON REFLECTION

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Where does the lesson go from here?

ASSESSMENT RESULTS: *summarize student data - describe trends that highlight student learning and trends that identify areas to target for improvement.*

- *What did the students learn - what data supports this?*
- *What do students need to learn or practice - what data supports this?*

DATA-BASED DECISIONS FOR FUTURE LESSONS: *outline future lesson topics based on student data - describe how the data influenced your decisions on lesson progression.*

UNIVERSAL LESSON REFLECTION

Directions: Reflect on your lesson planning, delivery, and assessment using the prompts below to guide your thinking. Prepare a response for each prompt to discuss with your mentor teacher and university supervisor.

GLOW: What went well in the lesson? Why?

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GROW: What within the lesson could be improved? How?

Were students engaged in the lesson? Explain.

Did you accomplish the learning goal? ____ YES ____ NO

If YES, what data supports your answer? If NO, what strategies, ideas, or supports can be implemented to maximize student learning?

Notes.