# Math Jeopardy Lesson Plan

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Standards/Performance Indicators/Skills

Identify the state and national standards, performance indicators, and skills addressed by the lesson.

11.13 Activity

Standard: 3.N.2.1 Represent multiplication facts by modeling a variety of approaches. (e.g., manipulatives, repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, skip counting)

Represent (applying), Modeling (Analysis)

3.VA.P.2.2 Use supplies and tools in a safe and responsible manner to create original art.

Use(application), Create (synthesis)

Learning Objectives/Goals

Describe the lesson's objectives and the learning outcomes that are appropriate for meeting curricular/classroom needs.

- Students will be able to apply repeated addition,equal-sized groups, arrays, area models, equal jumps on a number line, skip counting
- Students will solve multiplication facts using repeated addition,equal-sized groups, arrays, area models, equal jumps on a number line, or skip counting.

Apply (application), Solve (application)

Assessment (the type[s] of assessment used throughout the lesson)

Identify the assessment that occurred before, during, and after the lesson.

### Rubric: Jepoardy Rubric

**Pre-Test Questions** 

- 1. Name
- 2. List three approaches to the mathematical problem.
- 3. How would you classify the approach you will use?
- 4. Which statement supports a number line ?
- 5. What approach would you use to find the product of 4X3?
- 6. Develop a number line for 4X4.
- 7. What is the function of equal grouping?
- 8. Construct a model the represents one of the ways to show multiplication.
- 9. Prove that 6X6=36 by using one of the mathematical approaches
- 10. Design a mathematical problem and prove your answer by using two approaches.

#### Lesson Structure and Procedures

Describe the sequence of events of the lesson elements, including the before, during, and after of the lesson (i.e., the engagement/opening, the procedures used, the activities for guided practice, and the conclusion).

This lesson will fit into the larger piece of instruction with cross-curricular teaching by combining Math and Fine Arts. This will be evident through the learning activity while students complete the Jeopardy game and record their answers in their journal. The teacher will explicitly teach the concepts at the beginning of the lesson and will provide visual aids for students to refer back to when answering their questions with drawings. The students will play Jeopardy and each column has a different category and specific way that students are supposed to solve the problem they choose on the Jeopardy game. Depending on the column and category they chose, their drawing that they record in their journal should easily represent the problem they solved.

# Before / Engage

The teacher will display images on the board. The teacher will explain that the students will then discuss their observations with a partner before sharing with the whole group. The teacher will display images of different multiplication strategies without numbers. Give students time to think for themselves. Instruct students to turn and talk to a partner about what they noticed about the images.

# During / Explore - Explain

During the lesson the teacher will use explicit instruction to explain to students that they are going to focus on multiplication. The teacher will explain that while it is important to have math facts memorized, it is most important to understand the relationships between the numbers in the math facts. The teacher will tell them that they will be using whichever strategy they like best to solve multiplication expressions. The teacher will be showing the students how to use different strategies, many of which they saw in the introduction. As the teacher is showing the students the different strategies they will write in their math journals to record any words or phrases they think are important.

# After / Elaborate - Evaluate

After the lesson the students will use their knowledge of multiplication facts and strategies to work out the multiplication problems on the game Jeopardy that they will be playing on their computers as a class. The students will play the game in pairs and the teacher will be the instructor throughout the whole game.

# **Instructional Strategies**

Describe the teacher's approach to achieving the learning objectives and meeting the students' needs.

- The teacher will explain to students that they are going to focus on multiplication today.
- The teacher will display images of different multiplication strategies without numbers.<u>https://docs.google.com/presentation/d/1wY6s8rF1Qj7t\_bmCNdUwRp</u> <u>AOthD5WlbNus1mZ3lYwkU/edit?usp=sharing</u> Give students time to think for themselves. Instruct students to turn and talk to a partner about what they noticed about the images. The teacher will listen for students to name the strategies and make the connection to multiplication. Call on volunteers to share what they have discussed with their partner.
- The teacher will show the class how to solve the problem with the different strategies, including skip counting, equal groups, arrays, repeated addition, and a number line.
- The teacher will instruct students to take out the math journals, record the expression, and choose a strategy they like to use in order to find the answer to the problem. The teacher will encourage individuals to choose a different strategy.

#### Learning Activities

Describe the opportunities provided for the students to develop the skills of the objective.

Students will use their computers to find the math Jeopardy game. The class will then play Jeopardy together.

https://docs.google.com/presentation/d/1z\_9nJNIU7Ves9G8b-uK\_jA4Lf9vIrBmkNKFp9a5gwY/edit?usp=sharing

Resources and Materials

List the materials used to plan and deliver the lesson.

- Journal
- Pencil
- Small white boards / marker
- Smartboard / Powerpoint - <u>https://docs.google.com/presentation/d/1wY6s8rF1Qj7t\_bmCNdUwRpAOthD5W</u> <u>lbNus1mZ3lYwkU/edit?usp=sharing</u>
- Computers / Jeopardy Game -<a href="https://docs.google.com/presentation/d/1z\_9nJNIU7Ves9G8b--uK\_jA4Lf9vIrBmkNKFp9a5gwY/edit?usp=sharing">https://docs.google.com/presentation/d/1z\_9nJNIU7Ves9G8b--uK\_jA4Lf9vIrBmkNKFp9a5gwY/edit?usp=sharing</a>

#### Technology

Describe the instructional and/or assistive technology that was incorporated into the lesson to enhance instruction and student learning.

The technology that will be used is the smartboard and students computers for the Jeopardy game.

Differentiation/Accommodations/Modifications/Increases in Rigor

Describe the modifications made to meet the needs of all learners and to accommodate differences in students' learning, culture, language, etc.

In the Jeopardy game we will meet the needs of all learners by having the students all have a partner. This will be based on Vygotsk's theory of the more knowing other. Utilizing the more knowing other theory allows for a student to have access to knowledge they do not have, through their partner. This will allow the students to take their partners knowledge and apply it to their own to boost student learning.

Focus Student #1 does not receive Special Education services, but scored near the bottom of the pre-test for the lesson. She has little confidence in her abilities in this subject. She will be placed with a more knowing other during the learning activity, which

will allow her to see the thinking process of her peers. The teacher will use explicit instruction to help the student with understanding the different strategies to use in multiplication. The student will be given a vocabulary sheet with pictures describing each strategy. The teacher will also use guided practice throughout instruction. This will allow the student to build their confidence through working with the teacher and peers.

Focus Student #2 is learning English as a Second Language. He understands spoken English better than reading the textbook, and quickly catches on to new learning once explained within his language abilities. On the Jeopardy slide game there will be one made in Spanish for focus student #2. The student will be given vocabulary words in Spanish to read and understand the meanings of each.

#### **Classroom Management**

Identify the strategies used that are consistent with the learning objectives of the lesson and that also meet student behavior needs to help keep the students on task and actively engaged.

#### Extensions

Describe the activities for early finishers that extended the students' understanding of and thinking about the learning objectives/goals by having them apply their new knowledge in a different way.

# Follow-Up Activity to the Lesson

Describe a quick activity for review or for building on the lesson that will deepen student understanding and interconnect concepts. (The activity may be incorporated in class the next day or throughout the unit.)

Additional Information

Identify any area or lesson component that was not covered by this lesson plan format but that you feel is vital to include in a description of the lesson.