

Grade: 3

Curriculum Area: Math

Utah Core Objectives:

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA)

Represent and solve problems involving multiplication and division within 100 (**Standards 3.OA.1–4 and Standard 3.OA.7**). They demonstrate understanding of the properties of multiplication and the relationship between multiplication and division (**Standards 3.OA.5–6**). Students use the four operations to identify and explain patterns in arithmetic (**Standards 3.OA.8–9**).

Standard 3.OA.3

Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities. *For example, use drawings and equations with a symbol for the unknown number to represent the problem.*

Essential Question: What are ways to develop our own word problem in order to better understand multiplication?

Materials:

Construction Paper

Glue

Story Problem Worksheet

Personal Objectives: I want the students to be able to develop their own story problems in groups to better their understanding of how to break word problems down and use multiplication. They student will have the opportunity to use their creativity in making up their own story problems while also creating a visual representation of said problem.

Vocabulary: multiplication, story problem

Adaptations for Students with Special Needs:

- Deep thinking and review
- Ample time to develop own ideas

Adaptations for EL's:

- Write on board (project items on board), be clear about what we are learning about
- Provide frequent opportunities for interaction and discussion
- Constantly use scaffolding strategies throughout lesson
- Try and bring students background experiences into the lesson
- Engage student 90-100% of the time

Phase I: Exploration and Explanation

1. I will begin the lesson by having everyone open their books to page 220 of their HSP Math books. I will also have the page displayed up on the board in front of the class.
2. I will then say, "We have been working a lot on multiplication. Do you feel like you've gotten better?" "We are going to look more at word problems and story problems today. Everyone follow along under learn the strategy."
3. I will then read that portion (page 220) and go through the different story problems on the page. This will give the students an idea of the different types story problems that they will be able to use in the next part of the lesson.
4. This will take about 10 minutes to go through these 3 examples.
5. I will then show an example that I have come up with and drawn myself. This will give students a good idea of what I am looking for.
6. I then want to brainstorm with the class. I will breakdown the lesson in the sense that I want the students to come up with items we can include in our class word problem.
7. Explain the process of brainstorming that we are going through, i.e. picking an object or topic for said word problem, picking the numbers, or picking the people involved, etc.
8. At this point I will explain to them that they are going to create their own story problem (word problem).

Transition to Phase II:

1. Project example on board.
2. For Phase II I will be putting them in groups of 3 (based on their rows).
3. "In your groups you will brainstorm first to decide what you want your story problem to involve. Then you will come up with the numbers and write your problem down BEFORE drawing your array."
4. I will make sure to go over rules of working in a group. Explaining that all members of the group are expected to contribute and work together respectfully.
5. They will be expected to work together to work on creating a word/story problem together.
6. Tell them that if they get confused or caught up make sure to look on board first and think of our brainstorming process. Also explain that if they need help with the wording they can raise their hands and I will be walking around to help.

Phase II: Guided Practice

1. Roam the room scaffolding and provided help where needed. Some groups will need more assistance than others.

Transition to Phase III:

1. Review what they have learned!

2. Let them share their creations and let them solve their own or each other's.

Phase III: Independent Practice/Assessment

3. I assume this will take more than one class period with their drawings and everything so they will be able to finish the next day.