

Division Lesson Plan

Lesson: Problem Solving: Choose an Appropriate Equation

Length: 45 minutes

Age or Grade Level Intended: 3rd grade

Academic Standard(s):

MATH 3.2 Students solve problems involving addition and subtraction of whole numbers. They model and solve simple problems involving multiplication and division.

Performance Objective(s):

The students will answer in groups their given equation by writing out three equations and explain accurately to the class.

The students will complete all of the Reteaching 7-4 with 100% accuracy.

Assessment:

The students will be assessed on their word problem in their groups. They will write three equations on their paper and then put the answer on the bottom. These will be put up outside of the classroom.

Advance Preparation by Teacher:

- Write out word problems on construction paper for groups
- Put groups of three together

Procedure:

Introduction/Motivation:

You know how to solve problems involving addition, subtraction, multiplication and division. Today you will use what you know about these operations to write equations to show problem situations. Tell me how you would solve this word problem: In gym class, 21 students were placed in 3 groups of equal size. How could you find how many students were in each group? (You could divide 21 by 3) Is there another way? (multiplication or repeated addition) (Bloom: Knowledge, Application Gardner: Verbal/Linguistic)

Step-by-Step Plan:

1. Read problem aloud. Kenny was asked to hand out 24 crayons equally to the 4 people at his table. Let n stand for the number of crayons each person would get. Write an equation to show the problem. Work in pairs to discuss. (Gardner: Interpersonal)
2. We have already learned the meaning of division (it means sharing or repeated subtraction) We are going to use those meanings today to write equations with these lessons we have already learned.
3. What kind of problem have you been asked to solve? (Equal groups) Write an equation to find the answer to this problem. Your equation should show the information given in the problem and what you are asked to find. It should also

- show the mathematical operation needed to solve the problem. (Answers should vary between $n = 24/2$, $4 \times n = 24$ or $n+n+n+n = 24$) Now that we have seen how to write equations in three different ways we are going to watch the video to describe it more.
4. Have students come to the carpet and watch the develop the concept video on the smart board. (Gardner: Visual/Spatial)
 5. We are now going to get into groups of 3 and you will each be given a word problem on a piece of construction paper. Your job as a group is to find three different equations that will help you to solve them. Put your three equations and your answer on the bottom of the page. Be ready to present your problem to the class. (Gardner: Intrapersonal)
 6. After students have had enough time to work on them, they will present. Make sure students are listening and checking to each groups' answers.
 7. Now we will do the reteaching 7-4. Read the example problem to the students. Do these together. For number one, what other equation would have helped us solve this problem? (Bloom: Synthesis)
 8. Practice 7-4 is also done together. Have students do on their own then come together to test the answers.

Closure:

Next week we are going to learn how to write division stories. Today I gave you a word problem to solve on your own but it will be your turn to write your own world problem for the next lesson. How do you think we will go about doing this?

Adaptations/Enrichment:

Student with ADHD

This student will be put with a group of students for the activity that will help keep him on task and will help him understand what he has to do. The question on the construction paper given will help this student visually remember what instructions to follow.

Student with Gifts and Talents in Creativity

These students will be working in groups with the students to solve the division word problem. Because they are ahead on math and do their own facts and leveled math, they are required to do the activities and lesson with the rest of the class but only as review for them.

Self-Reflection:

- Did the students understand the lesson?
- Did I need to do a more hands on lesson to understand the concept?
- What else could I have done to help give the students more practice with this technique of division?
- Was my explanation beneficial enough for the students?
- Did the activity help the students with the lesson?