

Fact Family Lesson Plan

Lesson: Relating Multiplication and Division

Length: 45 minutes

Age or Grade Level Intended: 3rd grade

Academic Standard(s):

MA.3.2.4 2000 Know and use the inverse relationship between multiplication and division facts, such as $6 \times 7 = 42$, $42 \div 7 = 6$, $7 \times 6 = 42$, $42 \div 6 = 7$

Performance Objective(s):

The students will be given counters to solve one fact family on dry erase boards with 100% accuracy.

The students will be given their Independent and Reteaching to accurately solve all of the division problems.

The students will use multiplication and division to solve and relate to all of their Practice for homework with 100% accuracy.

Assessment:

The students will be assessed by their homework grade on the Practice 8-1. This assessment will help the students for practice on the next test. They are corrected in class the next day so they know what they did wrong.

Advance Preparation by Teacher:

- Have counters out for the students to use
- Have two students pass out dry erase boards
- Set up SMART board with lesson

Procedure:

Introduction/Motivation:

When we learned division last week, we learned how to use multiplication as division. We also learned about arrays, or fact families. What is an array? (A group of equal rows and columns) Arrays are also called fact families. What do you already know about fact families? Give me an example. (Bloom: Knowledge Gardner: Verbal/Linguistic)

Step-by-Step Plan:

1. I would like two students to pass out the dry erase boards and make sure all students have one.
2. Each group should also have counters at their desk to share.
3. If I gave you the numbers 3, 8, and 24, what fact family would you make? Use your counters to solve this problem. Write out all four of the number sentences and answers on your dry erase board. (Come around and check answers and help with questions) (Bloom: Comprehension Gardner: Visual/Spatial)

4. Once students have been given enough time to work on these, have students come together and show their dry erase boards. Ask one student to say one number sentence each until all number sentences have been answered.
5. Students are then told to leave their dry erase boards and counters on their desk and come to the carpet for the video portion of the lesson.
6. Watch the introduction lesson as a review for the students (They have already done a few fact families) (Gardner: Visual/Spatial)
7. After the introduction lesson begin the video lesson for 8-1. Point out the words to know and ask students what the words dividend, divisor, and quotient mean.
8. During lesson 8-1 ask students have multiplication and division relate and allow time for students to turn and talk to discuss answers. (Bloom: Analysis Gardner: Interpersonal)
9. When video is complete, students will go back to their seats. I will put up the independent practice on the board and students will do numbers 8-11 together and on their dry erase boards.
10. I will then tell two students to put the dry erase boards away. Using the SMART board, I will put up the Reteaching 8-1 for the students to do and then go over as a class. Make sure all students' answers are correct before moving on.

Closure:

The Practice 8-1 will be your homework for tomorrow so please fill out your agendas and put your homework in your mailbox. Tomorrow we will learn more about specific fact families and do an example on your own.

Adaptations/Enrichment:

Student with ADHD

This student uses his agenda and the board to stay on task and keep himself with the class. During the course of this lesson and during the day, the teacher aide and myself will make sure he is on task and has the help he needs. Because he is on medication, he is able to get his work done without being too distracted by the rest of the class.

Student with Gifts and Talents in Creativity

These students are already past this lesson in their learning, but they still listen to the lesson as review for them. They participate in the hands-on part of the lesson and help other students who have not already learned the lesson. This is beneficial for them as review and for myself so I do not have to help as many students. These students are being challenged during another part of the day when the rest of the class is doing math facts. They have their own math facts and their own accelerated math that helps challenge them to continue moving up in their math ability.

Self-Reflection:

- Were my students engaged?
- Did they understand the lesson?
- What more could I have done that would have been more hands-on?