



Lesson: Introduction

Lesson Objective

- Students will engage in a discussion about the importance of knowing multiplication and division facts with automaticity.

Instructional Materials

Material	Quantity	Description
Chart paper	2 pieces	
Felt-tip markers	3 different colors	
Display Master	1 each	Closure: Automaticity
Handout	1 for each student	Fact Automaticity Practice

Preview

This lesson provides an introduction to the Multiplication and Division Facts module. Students will discuss the importance of knowing and practicing multiplication and division facts. The emphasis will be on developing automaticity.

Discussion

1. Brainstorm with students about all of the things a point guard playing in a basketball game has to do and think about at the same time while

making a play.

Say: *When a guard has possession of the basketball, what are all of the things he/she must do and think about at the same time?*

Display students' results on one half of a piece of chart paper. Make a column for skills a basketball player does automatically (without thinking, e.g., dribbling and jogging) and a separate column for the things the player has to think about before doing (e.g., deciding where to pass or what play to run).

Say: *If a point guard could not do these things (point to the list of automatic skills) without thinking, do you think he/she would be able to do these things (point to the list of skills that require thinking)?*

Say: *When basketball players are just learning how to dribble, what types of things will they be thinking about?*

2. Introduce students to the idea of becoming automatic at solving multiplication and division facts.

Say: *When, in math class, can you perform better by knowing your multiplication facts automatically? (calculating equivalent fractions, percentages, area and volume, algebra)*

On the second piece of paper, display students' answers.

3. Stress the importance of fluency in math facts.


Say: *Knowing multiplication facts automatically gives your brain the freedom to think about these hard problems instead of just thinking about the facts. I know that most of you already know many of the multiplication facts, but in this module, we are going to learn strategies for solving facts we do not know and practice them so we can become automatic.*

4. Distribute the Fact Automaticity Practice handout.

Say: *We are going to start with a timed test to see how many facts you can answer in 2 minutes. You should not be able to finish the whole sheet today—the goal is to find out how much faster you are when we finish the module. We will complete this handout again to see how much you have improved.*

Say: *Ready, begin!*

Closure

Have students correct and write the number of problems they successfully completed at the top of the handout and collect them. Have a short discussion about how they feel about multiplication facts. Use the Automaticity  display master as needed. Ask students questions such as:

What did you do when you got to a fact that you could not answer?

Why is it important to be able to know the answers to facts automatically?

Which facts are most difficult to remember? Which are easiest?

Were there any facts that you already know automatically, without thinking about the answer? Which ones?