☆**M**STAR
INTERVENTION

Lesson: Closure

Lesson Objective

- Students will engage in a discussion about the importance of knowing multiplication and division facts with automaticity and reflect on their progress over the course of the module.

Instructional Materials

Material	Quantity	Description
Chart paper from Intro Lesson	1 piece	
Felt-tip marker	1	
Display Master	1 each	Discussion: Automaticity Revisited
Handout	1 for each student	Fact Automaticity Practice Revisited

Preview

This lesson provides students with an opportunity to connect the mathematical ideas taught in the module to the importance of automaticity as discussed using the point guard example.

Engage Acquired Knowledge

1. Have students discuss their learning experiences throughout the module. Ask questions such as:

- Do you feel you know more facts automatically now? How do you know?

- What is a strategy you can use if you do not know a fact automatically?

- What is an example of a time you might need to know a multiplication fact in everyday life?

- What is an example of a time you might need to know a division fact in everyday life?

- What was your favorite part of this course? What was your least favorite part? Explain.

- What was the easiest part of this course? What was the hardest part? Explain.

Discussion

1. Discuss why automaticity is important.

Display the chart students made at the beginning of the course. The chart shows what skills a point guard has to be able to do automatically (without thinking) and what things the point guard has to think about during a play.

- Why do you think a point guard has to be able to do these skills (e.g., dribbling, jogging) automatically?

- If the point guard could not do these automatic skills, would he or she be a good point guard? Why or why not?

- What skills in math are important to be able to do automatically?

- Why is it important to be able to do math facts automatically?

- What types of problems do you have to use multiplication and division facts to be able to answer?

- Do you expect math to get harder or easier next year? In high school? In college?

- What would happen if you were trying to solve harder math problems but you didn't know your math facts automatically? Would you be able to think as hard about the problem? Why or why not?

2. Distribute the Automaticity: Revisited handout

Have students set a goal for how many facts they will be able to answer and write it at the top of their paper.

> **Say:** *We are going to finish with a timed test to see how many facts you can answer in 2 minutes. You may not be able to answer all of the facts on the page, but you should be able to see how much you have improved since the beginning of the module.*

> **Say:** *Ready, begin!*

3. Discuss students' areas of improvement since the beginning of the course. Ask questions such as:

- What facts do you know now that you did not know at the beginning of the course?

- Are there any facts that are automatic now that were not at the beginning of the course?

- 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 the most difficult to remember? Which are the easiest?

- What can you do to keep practicing your facts until they are all automatic?

Use the Automaticity Revisited **DM** display master as needed.

Closure

Reiterate why knowing math facts automatically will help students succeed in school and in the real world. Summarize strategies discussed in prior lessons that students can use when they do not know a fact, as well as strategies to use to improve fact fluency.