

Think-Share-Compare Routine

What Is It?

The *Ready* Think-Share-Compare Routine helps students achieve greater mathematical proficiency and rigor within a collaborative structure. Students develop greater understanding of mathematical models and strategies using think time, partner talk, individual writing, and whole class discourse.

When to Use It

Use the Think-Share-Compare Routine during the Introduction, Modeled and Guided Instruction, and Guided Practice sections of each *Ready* lesson.

Why It Matters

There are many ways to approach mathematical thinking and solutions to problems, but when only one way is presented, students may think they “didn’t do it right,” even when their solution process or thinking is accurate. Exposing students to a number of models and approaches helps them:

- Build mathematical confidence.
- Make connections between representations.
- Develop flexible thinking.
- Deepen and extend conceptual understanding.
- Construct viable arguments and politely critique the reasoning of others.
- Stay engaged, focused, and motivated.

Management Tips

Allow time for productive struggle.

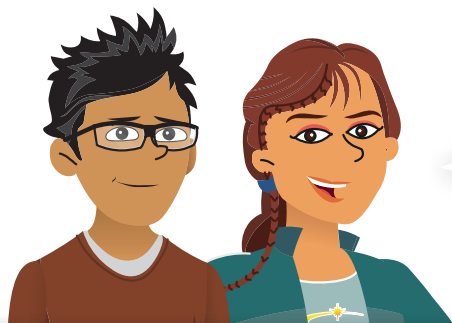
- **Have students talk with a partner about their ideas** or try another strategy.
- **Avoid telling students** whether their approach or answers are incorrect. Instead, prompt students:
 - *Do you agree with [student’s] answer?*
Why or why not?

Create classroom discussion guidelines.

- **Have students listen carefully** to their partners.
- **Tell students to ask questions** if they don’t understand, such as *I was confused when you said...*
- **Guide students to respect others’ ideas** and add on to them.

Prepare for the classroom conversations.

- **Circulate** as students work.
- **Identify strategies and models** to highlight in the classroom discussion.
- **Sequence the strategies** you want to discuss. You may want to start with a student who has an incorrect answer or solution process to address common misconceptions and promote discussion.



Talking can help us better understand ways to solve a problem.

Think-Share-Compare Routine

1. Make Sense of the Problem

Read and understand the problem or question. Think about the key information.

Read the problem together as a class. Make sure students understand what they are being asked to do. Ask a few students to describe what the problem is about. Have several students explain what the problem is asking them to do and what information they know.

2. Solve and Support Your Thinking

Include pictures, models, and/or explanations in your solutions. If you have time, show another way to solve it.

Allow enough time for students to persevere as they think through their solutions. Make sure students are showing the models and strategies they use.

3. Discuss

Explain your thinking to a partner. Discuss how your strategies are alike and different.

Have partners discuss their strategies. Circulate to hear conversations and select and sequence solutions to discuss with the whole class.

4. Compare

Compare your strategies with the class, including the strategies in the *Ready* book.

Call on students to share their answers and solution strategies with the class. Be sure to ask students if they agree or disagree with a student's strategy, rather than telling if the strategy is right or wrong.

5. Connect and Reflect

Complete and discuss the *Connect It* questions.

Have students complete the *Connect It* questions or *Reflect* question from the *Ready* Instruction book. Choose key questions to discuss as a class.

6. Apply

Apply what you have learned to a new problem. Be sure to support your answer.

Use *Try It* questions or practice problems corresponding to the lesson in *Practice and Problem Solving*.