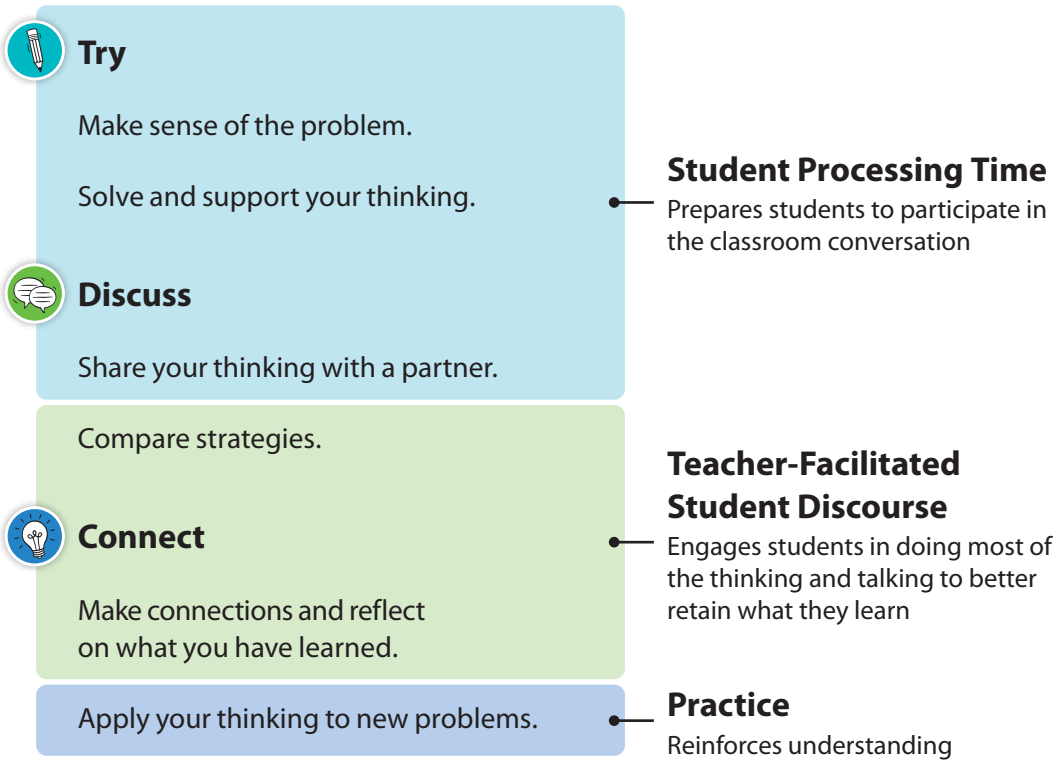
What Is the Try–Discuss–Connect Instructional Framework?

Try–Discuss–Connect is a framework that helps engage students in talking about mathematics.

- Use primarily on Develop session days
- Integrates effective teaching strategies to meet the needs of all learners
- Gives students time to process ideas so they are prepared for the classroom conversation

Each step of Try–Discuss–Connect has a specific purpose in supporting learning and discourse.

Try–Discuss–Connect Framework



TEACHING TIPS FOR

Try–Discuss–Connect

The **Try–Discuss–Connect framework** helps support students in developing mathematical thinking and helps teachers in facilitating engaging, discourse-based lessons. Some teachers describe it as a "number talk" for problem solving!

Try It Teaching Tips

Make Sense of the Problem

Why? Make sure students understand the context, vocabulary, and important information.

How? You'll usually use the routines Notice and Wonder or Three Reads as a whole class.

- In Three Reads, the teacher reads the problem first, followed by a student, then the class.
- Before the problem is read, focus students' attention on what they are listening for.
  - In the first read, students explain the context and clarify any unknown vocabulary.
  - In the second read, students focus on what they are being asked to find (but not how).
  - In the third read, students determine the important information—the known and unknown quantities (i.e., numbers) and relationships (e.g., twice as many) in the problem. An example from Grade 4 is shown below.

Jaime finds 3 times as many shells at the beach as Calvin finds. Jaime finds 24 shells. Write and solve an equation to find the number of shells Calvin finds.

What quantities are in the problem?	What relationships are in the problem?
• The number of shells Jaime found (Jaime has 24 shells.) • The number of shells Calvin found (We don't know this number yet.)	• The number of shells Jaime found is three times the number of shells Calvin found. (Jaime finds 3 times as many shells as Calvin.)

Solve and Support Your Thinking

Why? Students will better understand the classroom explanations if they've had time to think about the problem on their own. It also helps promote productive perseverance.

How? Allow students to work on the problem using any strategies or tools that make sense to them.

- Avoid the temptation to step in to help students at this time. This is time for them to think. Instead ask a question to prompt or redirect thinking and walk away.
- Don't wait for every student to solve the problem. Students can share partial thinking too.

Discuss It Teaching Tips

Share Your Thinking with a Partner

Why? Students build confidence and learn from one another when they share ideas.

How? Use sentence frames and questions from the session slides to launch partner conversations.

- You may want to model student-to-student conversation to help students be successful.
- As you walk around, choose a couple of students to share their ideas or strategy with the class. Keep the goals of the lesson in mind as you choose strategies to help advance the lesson.
  - For Grades 2–8, if someone does a strategy like Picture It or Model It, choose those.
  - If several students make the same mistake, you may want to discuss that strategy.
  - Remember it's okay to choose a strategy that isn't complete to finish as a class.

Share Your Thinking with the Class

Why? Students learn to explain their thinking and critique the reasoning of others.

How? Have the selected students share their strategy with the class one at a time.

- While students share their strategies, ask other students to repeat or rephrase what was shared during the explanation. This gives all students time to process what they hear.
- Have students use hand signals to show agreement or disagreement with ideas. Then have students explain why they agree or disagree with what has been shared.
- For Grades 2–8, if no student used the standards-aligned strategies shown in Picture It or Model It, display the strategy and give students time to make sense of it before asking the questions in the notes section of the session slides.

Connect It Teaching Tips

Make Connections and Reflect on What You Have Learned

Why? When students find the similarities and differences between strategies, it builds flexibility, helps advance student thinking, and develops critical thinking.

How? Choose a few of the Connect It questions that have not already been asked to discuss orally with the class. If time allows, you may want to have students respond to one or two in writing.

Apply Your Thinking to a New Problem

Why? Students reinforce understanding of the strategies in the lesson by answering new questions.

How? Students do the Apply It questions and/or the green Practice pages in their Student Worktext.

- Have students, especially English Learners, use the Three Reads Notecatcher on page 41 to support making sense of the problem and persevering in solving problems (SMP 1).
- For additional practice options, see pages 32–33.