## EMTP 8 Elicit & Use Evidence of Student Thinking

Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

NCTM (2014, p. 53)

## CHECK IN ON STUDENT LEARNING

What is important to notice in students' mathematical thinking?

How can I plan to elicit that information?

What does the evidence mean with respect to students' learning?

How do I respond based on students' understanding?

Adapted from Jacobs, Lamb, and Philipp (2010)

## As a teacher I...

- plan various ways to gather evidence to determine the progress each student is making.
- check students' understanding at key points in a lesson by attending to written work and student explanations.
- listen and look for students' approaches and representations, asking clarifying questions as needed.
- decide how to respond in the moment (adapt the task and/or pose a question) to support or challenge student thinking.
- use students' work and reasoning, such as commonly used strategies, major struggles, and unique perspectives, for classroom discussion and planning next steps.

## so that my students...

- show their math thinking and strategies in their work.
- share their math explanations and illustrations in class discussions.
- · seek feedback and learn from mistakes.
- ask questions, share ideas, and help classmates with their learning.
- keep track of their own progress, seeing their growth, and figuring out what they need to work on.