Effective teaching of mathematics uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.

NCTM (2014, p. 35)

As a teacher I...

- plan and ask a variety of questions to gather information, probe thinking, make the math visible and encourage reflection & justification.
- use questions to support student thinking without funneling students towards a particular answer or procedure.
- pose questions both for assessing student knowledge and thinking and to advance students' thinking.
- use wait time to show their thinking is valued and all students have enough time to think before they answer.

Gather Information "What is ...?" or "How did you ...?"

Encourage
Reflection &
Justification
"Will that always
work? or "How
could you
prove ...?"

Adapted from NCTM (2014, pp. 36-37)

Probe
"Why did you ...?"
or "Can you tell
me more
about ...?"

Make the Mathematics Visible

"How does ...
connect to ...?" or
"How can you
apply ... to?"

so that my students...

- think more deeply, understand the math more clearly, and have opportunities to explain their thinking.
- are ready to explain, clarify, and elaborate on their thinking.
- take their time to answer questions carefully instead of rushing.
- think about why their answers make sense and are able to justify their work.
- listen to their classmates, ask questions, and share their thoughts about others' ideas.