



# EMTP 5 - Pose Purposeful Questions

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- 1 EMTP 5 - Pose purposeful questions.
- 2 Questions are a powerful tool in the math classroom, and how we ask them shapes the student
- 3 learning experience. Effective mathematics teaching uses purposeful questions to assess and
- 4 advance students' reasoning and sense making about important mathematical ideas.
- 5 Effective questioning requires intentional planning. Teachers must plan for possible student
- 6 responses and craft questions that guide student thinking without doing the work for them.
- 7 Teachers should ask questions with a variety of different functions in order to gather information,
- 8 probe thinking, make the math visible, and encourage reflection and justification. These choices
- 9 help keep the discussion oriented towards the goals of the lesson.
- 10 Students, too, play a crucial role in this process. By asking and answering purposeful questions,
- 11 they learn to reflect on their problem-solving process, share their thinking to help themselves and
- 12 others grow, and listen actively to peers in order to make connections across ideas.
- 13 One key part of effective questioning is giving students ample "wait time"—that pause after a
- 14 question that lets students think before they answer. This gives students an opportunity to process
- 15 their thoughts before sharing out. The types of questions also matter. Teachers need to be careful
- 16 not to ask closed questions - those with a single correct answer. Instead, teachers should ask
- 17 open-ended questions, listen carefully to students' reasoning, and guide students to articulate and
- 18 refine their own thinking. This allows students to take ownership of their learning.
- 19 Well planned questions can transform the classroom into a collaborative learning community where
- 20 students engage in discussions, explore connections, and refine their reasoning. By posing



21 questions that elicit student thinking, encourage reflection, and build connections, teachers create a

22 space for deeper, more meaningful learning.