

# 5 Practices Monitoring Student Responses Planning Tool

This resource is intended to support planning and monitoring of student thinking during the use of a high-level task. Anticipating strategies and preparing questions to use during the lesson helps make instructional decisions in the moment based on student thinking. For more support around the components, refer to the book *5 Practices for Orchestrating Productive Mathematics Discussions* (Smith & Stein, 2018).

## Learning Goal and Standard

Select the standard(s) or major cluster that will be the focus of the task. Consider the broader learning goal or big idea that identifies what students are to know and understand about mathematics as a result of the task.

## Aligned Task

Select a high-level task aligned to the goal - that is, the thinking and solution(s) could be represented in multiple ways, there are explicit or implicit pathways that have close connections to the underlying conceptual ideas, and require considerable cognitive effort from the students.

## Strategy

Reflect and list possible responses or strategies - both correct and incorrect - that students might use. Leave one or two rows blank for strategies that come up unexpectedly. Indicate which strategies would be most important to build connections towards the learning goal.

## Preparing Questions

### Assessing Questions

Assessing questions are intended to make a student's current thinking visible and help the teacher understand what the student did and why. These questions are meant to clarify what work is being shown in relation to the learning goal. The teacher asks and listens for the response.

### Advancing Questions

Advancing questions are intended to move students beyond where they are toward the lesson goal. These questions potentially move a student from unproductive to productive struggle; they can encourage a student to think about the problem differently or reveal a nugget of information that prompts a shift in thinking, helping them get unstuck. The teacher asks, then leaves to allow the student(s) time to process, following up later to see what progress they have made.

## Sequencing

Identify representations or strategies that address the learning goal. Indicate in the planning tool which strategies you want to surface during the consolidation phase. Select only the strategies that build a coherent story towards the learning goal. Not all strategies need to be included, keeping in mind what will work best for your students. Be prepared to include any strategies students might not have considered.

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**Learning Goal and Standard:**

**Aligned Task:**

Strategy	Assessing Questions	Advancing Questions	Who and What (completed in the moment)	Sequencing (adjust based on student need)

*Note.* Adapted from *Five Practices for Orchestrating Productive Mathematics Discussions*, by Margaret Schwan Smith & Mary Kay Stein, 2018, National Council of Teachers of Mathematics.