Guide for Planning and Instruction

5 Practices of Orchestrating Math Discussions

PLANNING GUIDE	
1. Select a task (*Note:* If you are using a curriculum, select one key problem from the lesson to focus on.)	**What is your objective/learning outcome for the lesson?** **What task did you select?**
2. Connect to standards	**What standard(s) align?** **Will this lesson mainly focus on building conceptual understanding, procedural skill/fluency, and/or application?**

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3. Solve the task	**Solve the task using a strategy of your choice, aligned to the standard.**
4. Anticipate student solutions	**What other strategies do you think students will use to solve the problem? Solve the problem using those strategies.** **What incorrect solutions do you think students will have? Solve the problem using those strategies.**

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5. Plan for accessibility	**How will you ensure all students have access to this grade-level task?** *(Suggestion: use a Mathematical Language Routine (MLR) or other instructional routine, such as Notice & Wonder, to increase accessibility)*
6. Plan to sequence and connect strategies	**In what order might you have students share their strategies during a class discussion? Why?** **What questions might you ask to help students make connections between strategies to reinforce the goal of the lesson?**

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LESSON STRUCTURE	
Timing	**Lesson Activity**
5 min	***Introduce the problem*** • Read the problem as a class (optional scaffold) • Ask students to share what they notice and wonder about the problem • Provide time for individuals to think about the problem and consider solution pathways
5 min	***Initial brainstorm*** • Provide time for students to turn and talk with a partner about their ideas • Collect initial ideas on the board (optional scaffold)
5-20 min	***Worktime*** • Students work on the problem, individually or in small groups • Teacher circulates the room to monitor, ask questions to elicit student thinking and check for understanding • Teacher makes note of student solution methods and makes decisions about which students will share with the class and in what order
15-20 min	***Whole class discussion*** • 2-4 students share their solution strategies at the board based on teacher selection/sequencing (suggestion to share strategies from concrete to abstract) • Students ask questions or share observations about strategies • Teacher asks questions to help students connect strategies and reinforce the learning goal
5 min	***Lesson summary*** • Teacher facilitates the summary of the mathematics with references to student work and discussion in order to reinforce the purpose of the lesson • Teacher may call on students to articulate new learning and make connections to prior understanding

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