

54 Questioning Across Lesson Phases (Focus on Productive Struggle)

Instructions: Building perseverance requires support for students as they engage in productive struggle. Use this tool to plan strategies to support students so they will stay with a task. One tendency in teaching is to take away the struggle—this tool is targeted at *maintaining* the challenge but also at providing encouragement and structures to develop perseverance.

Anticipate student responses

How might students approach the problem (across the range of learners in your class)?

Launching the task

What explicit, specific statements might you make to **encourage** and **motivate** students to invest time in the task (not by telling them that it is relevant to a test or that they will need it for their future)?

Monitoring the task: Circle/highlight questions you might use.	
Add ones specific to the task(s).	
 To get started with the problem: How would you describe the problem in your own words? What information does the problem give you? What strategies might you use? What tools will you need? What do you think the answer might be? Others: 	 If a student is stuck: Can you think of other problems like this one? Could you try it with simpler numbers/shapes/situation? Fewer numbers? Would it help to create a diagram? Make a table? Draw a picture? Can you guess and check? Others:
 As students implement their strategies: Can you explain what you did so far? Why did you decide to use this method? Have you thought of all the possibilities? Why did you decide to organize your results like that? Do you see a pattern? Others: 	 If a student has finished (early): What do you notice if ? Now that you are done, do you see another way (more efficient way) that you could have solved it? Would your strategy work with other numbers/different parameters? Others:

Summarizing the task

What explicit, specific statements might you make to recognize students' perseverance?

Source: Previously published by Bay-Williams, J., McGatha, M., Kobett, B., and Wray, J. (2014). Mathematics Coaching: Resources and Tools for Coaches and Leaders, K–12. New York, NY: Pearson Education, Inc.

Retrieved from the companion website for *Everything You Need for Mathematics Coaching: Tools, Plans, and A Process That Works: Grades K–12* by Maggie B. McGatha and Jennifer M. Bay-Williams with Beth McCord Kobett and Jonathan A. Wray. Thousand Oaks, CA: Corwin, www.corwin.com. Copyright © 2018 by Corwin. All rights reserved. Reproduction authorized only for the local school site or nonprofit organization that has purchased this book.