



# Supporting the Mathematical Practices and Processes Through Questioning

MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM.	<ul style="list-style-type: none"><li>What is the problem asking?</li><li>How will you use that information?</li><li>What other information do you need?</li><li>What is another way to solve that problem?</li><li>What can you do if you don't know how to solve a problem?</li><li>Have you solved a problem similar to this one?</li><li>How do you know your answer makes sense?</li></ul>
REASON ABSTRACTLY AND QUANTITATIVELY.	<ul style="list-style-type: none"><li>What quantities are referenced?</li><li>How are the quantities related?</li><li>How can you represent this situation?</li><li>How do the quantities and the units relate?</li><li>What are the correct units for the quantities in the problem?</li><li>How do you know your answer is reasonable?</li></ul>
CONSTRUCT VIABLE ARGUMENTS AND CRITIQUE THE REASONING OF OTHERS.	<ul style="list-style-type: none"><li>Will that method always work? How do you know?</li><li>What do you think about what the other student said?</li><li>Who agrees or disagrees, and why?</li><li>Does anyone have another way of looking at that?</li><li>What do you think will happen if...?</li><li>When would that not be true?</li><li>Does that make sense to you? Why?</li></ul>
MODEL WITH MATHEMATICS.	<ul style="list-style-type: none"><li>Why is that a good model for this problem?</li><li>How can you use a simpler problem to help you find the answer?</li><li>What conclusions can you make from your model?</li><li>Do your results make sense with the context of the problem?</li><li>How would you change your model if...?</li></ul>
USE APPROPRIATE TOOLS STRATEGICALLY.	<ul style="list-style-type: none"><li>What could you use to help you solve the problem?</li><li>What strategy could you use to make that calculation easier?</li><li>How would estimation help you solve that problem?</li><li>Why did you decide to use...?</li></ul>
ATTEND TO PRECISION.	<ul style="list-style-type: none"><li>How do you know your answer is reasonable?</li><li>How can you use math vocabulary in your explanation?</li><li>How do you know those answers are equivalent?</li><li>What does that mean?</li></ul>
LOOK FOR AND MAKE USE OF STRUCTURE.	<ul style="list-style-type: none"><li>What rule did you use to make this group?</li><li>Why can you use that property in this problem?</li><li>How is that like...?</li></ul>
LOOK FOR AND EXPRESS REGULARITY IN REPEATED REASONING.	<ul style="list-style-type: none"><li>How did you discover that pattern?</li><li>What other patterns can you find?</li><li>What do you remember about...?</li><li>What happens when...?</li><li>What if you...instead of...?</li><li>What might be a shortcut for...?</li></ul>

To learn more, please visit [hmhco.com/intomath](https://www.hmhco.com/intomath)