







## **Supporting the Mathematical Practices** and Processes Through Questioning

MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM.	<ul> <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.	What quantities are referenced? How are the quantities related? How can you represent this situation? How do the quantities and the units relate? What are the correct units for the quantities in the problem? How do you know your answer is reasonable?
CONSTRUCT VIABLE ARGUMENTS AND CRITIQUE THE REASONING OF OTHERS.	<ul> <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> <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> <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.	How do you know your answer is reasonable? How can you use math vocabulary in your explanation? How do you know those answers are equivalent? What does that mean?
LOOK FOR AND MAKE USE OF STRUCTURE.	<ul> <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.	How did you discover that pattern? What other patterns can you find? What do you remember about? What happens when? What if youinstead of? What might be a shortcut for?

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