

Mathematics | Supporting the Standards for Mathematical Practice

When you ask ...	Students ...
<ul style="list-style-type: none"> • What is the problem asking? • How will you use that information? • What other information do you need? • Why did you choose that operation? • What is another way to solve that problem? • Have you solved a problem similar to this one? • When did you realize your first method would not work for this problem? • How do you know your answer makes sense? 	Make sense of problems and persevere in solving them.
<ul style="list-style-type: none"> • What is a situation that could be represented by this equation? • Why does that operation represent this situation? • What is another operation you could have used to represent the situation? • What properties did you use to find the answer? • How do you know your answer is reasonable? 	Reason abstractly and quantitatively
<ul style="list-style-type: none"> • Will that method always work? • How do you know? • What do you think about what she said? • Who can tell us about a different method? • What do you think will happen if ...? • When would that not be true? • Why do you agree/disagree with what he said? • What do you want to ask her about her work? • How does that drawing support your work? • Justify your solution. 	Construct viable arguments and critique the reasoning of others.
<ul style="list-style-type: none"> • Why is that a good model for this problem? • How can you use a simpler problem to help you find the answer? • What conclusions can you make from your model? • How would you change your model if ...? 	Model with mathematics.
<ul style="list-style-type: none"> • What could you use to help you solve the problem? • What strategy could you use to make that calculation easier? • How would estimation help you solve the problem? • Why did you decide to use ... 	Use appropriate tools strategically.
<ul style="list-style-type: none"> • 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? 	Attend to Precision
<ul style="list-style-type: none"> • How did you discover that pattern? • What other patterns can you find? • What rule did you use to make this group? • Why can you use that property in this problem? • How is this like ...? 	Look for and make use of structure.
<ul style="list-style-type: none"> • What do you remember about ...? • What happens when? • What if you ... instead of? • What might be a shortcut for? 	Look for and express regularity in repeated reasoning.