

Common Core State Standards ~ Standards for Mathematical Practice

Questions for Teachers to Ask

Make sense of problems and persevere in solving them	Reason abstractly and quantitatively	Construct viable arguments and critique the reasoning of others	Model with mathematics
<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • What is this problem asking? • How could you start this problem? • How could you make this problem easier to solve? • How is ____'s way of solving the problem like/different from yours? • Does your plan make sense? Why or why not? • What tools/manipulatives might help you? • What are you having trouble with? • How can you check this? 	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • What does the number ____ represent in the problem? • How can you represent the problem with symbols and numbers? • Create a representation of the problem. 	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • How is your answer different than ____'s? • How can you prove that your answer is correct? • What math language will help you prove your answer? • What examples could prove or disprove your argument? • What do you think about ____'s argument • What is wrong with ____'s thinking? • What questions do you have for ____? <p><i>*it is important that the teacher poses tasks that involve arguments or critiques</i></p>	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • Write a number sentence to describe this situation • What do you already know about solving this problem? • What connections do you see? • Why do the results make sense? • Is this working or do you need to change your model? <p><i>*It is important that the teacher poses tasks that involve real world situations</i></p>
Use appropriate tools strategically	Attend to precision	Look for and make use of structure	Look for and express regularity in repeated reasoning
<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • How could you use manipulatives or a drawing to show your thinking? • Which tool/manipulative would be best for this problem? • What other resources could help you solve this problem? 	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • What does the word ____ mean? • Explain what you did to solve the problem. • Compare your answer to ____'s answer • What labels could you use? • How do you know your answer is accurate? • Did you use the most efficient way to solve the problem? 	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • Why does this happen? • How is ____ related to ____? • Why is this important to the problem? • What do you know about ____ that you can apply to this situation? • How can you use what you know to explain why this works? • What patterns do you see? <p><i>*deductive reasoning (moving from general to specific)</i></p>	<p><i>Teachers ask:</i></p> <ul style="list-style-type: none"> • What generalizations can you make? • Can you find a shortcut to solve the problem? How would your shortcut make the problem easier? • How could this problem help you solve another problem? <p><i>*inductive reasoning (moving from specific to general)</i></p>