Kindergarten – 12 Parent Guide for the Standards for Mathematical Practice K - 12

Practice Standard	How a child can use the practice standards?	Questions to ask
1. Make sense of problems and persevere in solving them.	• I can make my own plan for solving the problem and stick with it even if it is difficult. • I can check the reasonableness of my answer. • I can solve it a second way to make sure I am right!	• What plan can you make to solve this problem? • Can you draw a picture or act out the problem? • What information is in the problem and what are you trying to figure out?
2. Reason abstractly and quantitatively.	• I can use numbers and words to help make sense of problems. • I can think about what each number represents. • I can think about the relationships between the numbers in the problem. • I can think about what property might be used to solve the problem. • I can think about whether other operations might be used.	• Can you explain what the numbers in the problem mean? • How did you decide to use this operation?
3. Construct viable arguments and critique the reasoning of others.	• I can explain my thinking using objects, drawings or actions • I can consider the thinking of other students • I can ask questions to clarify my understanding • I can make connections to other strategies	• How could you prove that.....? • How can we be sure? • Is this like another problem you have solved before?
4. Model with mathematics.	• I can recognize math in everyday life and use it to solve problems • I can use pictures, words, objects or symbols to solve. • I can use number lines, arrays or other models to help myself as I solve the problem or to represent my solution	• What model could you construct that might help you solve this problem? • Can you visualize the action in this problem?

5. Use appropriate tools strategically.	• I can use math tools such as number lines, calculators, objects, tables, etc. to solve a problem. • I can use estimates when problem solving.	• What tools could we use to solve this problem? • What information do you have that might help?
6. Attend to precision.	• I can be careful when I use math and clear when I share my ideas. • I always think about whether my answer is reasonable! • I try to be efficient and concise when I solve a problem. (this looks different at various grade levels) • I can test my solution by solving a different way or by modeling the solution and checking for reasonableness.	• How do you know your solution is reasonable? • How could you test your solution to see if it accurately answers the problem?
7. Look for and make use of structure.	• I can see and understand how numbers and shapes are put together as parts and wholes. • I look for patterns that can help me solve a problem. • I think about other problems I have solved before and whether they can help me with this problem. • I try to connect mathematical ideas.	• What do you notice when...? • What patterns do you find in...? • What are some other problems that are similar to this one?
8. Look for and express regularity in repeated reasoning.	• I can notice when calculations are repeated and use these ideas to create a strategy. • I think about whether patterns are always true in all situations. • I can create rules for patterns.	• Is this always true? • What do you notice about...? • What is happening in this situation?