

The Standards for Mathematical Practice

Grades K-12

Mathematically proficient students...	<i>Which means that your child will...</i>
<p>1 Make sense of problems and persevere in solving them.</p>	<ul style="list-style-type: none"> • Take time to read and think carefully about a problem • Work hard even when challenged • Work on complex tasks with peers • Build stamina for mathematics • Try different strategies • Be motivated to tackle challenges
<p>2 Reason abstractly and quantitatively.</p>	<ul style="list-style-type: none"> • Understand and use the contextual situation of a problem • Identify needed quantities in a problem and use them to compute • Explain what a solution means in the context of the problem • Label quantities appropriately
<p>3 Construct viable arguments and critique the reasoning of others.</p>	<ul style="list-style-type: none"> • Justify methods and solutions with clarity • Speak and write about mathematics • Form a logical argument as proof • Discuss mathematical ideas with others • Listen actively to classmates' thinking and analyze the validity of their claims
<p>4 Model with mathematics.</p>	<ul style="list-style-type: none"> • Use models such as graphs, drawings, tables, symbols, and diagrams to solve problems • Solve real-world problems using mathematics
<p>5 Use appropriate tools strategically.</p>	<ul style="list-style-type: none"> • Estimate an answer before using a tool • Select the right tool for the job • Tools include paper-and-pencil algorithms and formulas
<p>6 Attend to precision.</p>	<ul style="list-style-type: none"> • Use correct mathematical vocabulary and symbols • Assess the reasonableness of answers • Decide whether an estimate or an exact answer is needed
<p>7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> • Notice, continue, and create patterns • Use patterns to solve problems
<p>8 Look for and express regularity in repeated reasoning.</p>	<ul style="list-style-type: none"> • Notice patterns in calculations to create and explain rules and shortcuts • Generalize rules and properties of number to more easily solve problems