



## 2.6 Mathematical Practice Look Fors

Instructions: During a lesson, listen for student actions related to any or all of these Mathematical Practices. Note what they said or did in the examples column.

<b>Mathematical Practice</b>	<b>Student Look Fors</b>	<b>Examples</b>
1. Make sense of problems and persevere in solving them.	<ul style="list-style-type: none"><li><input type="checkbox"/> Analyze information (givens, constraints, relationships, goals).</li><li><input type="checkbox"/> Make conjectures and plan a solution pathway.</li><li><input type="checkbox"/> Use objects, drawings, and diagrams to solve problems.</li><li><input type="checkbox"/> Monitor progress and change course as necessary.</li><li><input type="checkbox"/> Check answers to problems and ask, "Does this make sense?"</li></ul>	
2. Reason abstractly and quantitatively.	<ul style="list-style-type: none"><li><input type="checkbox"/> Make sense of quantities and relationships in problem situations.</li><li><input type="checkbox"/> Create a coherent representation of a problem.</li><li><input type="checkbox"/> Translate from contextualized to generalized or vice versa.</li><li><input type="checkbox"/> Flexibly use properties of operations.</li></ul>	
3. Construct viable arguments and critique the reasoning of others.	<ul style="list-style-type: none"><li><input type="checkbox"/> Make conjectures and use counterexamples to build a logical progression of statements to support ideas.</li><li><input type="checkbox"/> Use definitions and previously established results.</li><li><input type="checkbox"/> Listen to or read the arguments of others.</li><li><input type="checkbox"/> Ask probing questions to other students.</li></ul>	
4. Model with mathematics.	<ul style="list-style-type: none"><li><input type="checkbox"/> Determine equation that represents a situation.</li><li><input type="checkbox"/> Illustrate mathematical relationships using diagrams, two-way tables, graphs, flowcharts, and formulas.</li><li><input type="checkbox"/> Check to see whether an answer makes sense within the context of a situation and change a model when necessary.</li></ul>	

<b>Mathematical Practice</b>	<b>Student Look Fors</b>	<b>Examples</b>
5. Use appropriate tools strategically.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Choose tools that are appropriate for the task (e.g., manipulative, calculator, digital technology, ruler).</li> <li><input type="checkbox"/> Use technological tools to visualize the results of assumptions, explore consequences, and compare predictions with data.</li> <li><input type="checkbox"/> Identify relevant external math resources (digital content on a website) and use them to pose or solve problems.</li> </ul>	
6. Attend to precision.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Communicate precisely using appropriate terminology.</li> <li><input type="checkbox"/> Specify units of measure and provide accurate labels on graphs.</li> <li><input type="checkbox"/> Express numerical answers with appropriate degree of precision.</li> <li><input type="checkbox"/> Provide carefully formulated explanations.</li> </ul>	
7. Look for and make use of structure.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Notice patterns or structure, recognizing that quantities can be represented in different ways.</li> <li><input type="checkbox"/> Use knowledge of properties to efficiently solve problems.</li> <li><input type="checkbox"/> View complicated quantities both as single objects and as compositions of several objects.</li> </ul>	
8. Look for and express regularity in repeated reasoning.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Notice repeated calculations and look for general methods and shortcuts.</li> <li><input type="checkbox"/> Maintain oversight of the process while attending to the details.</li> <li><input type="checkbox"/> Evaluate reasonableness of intermediate and final results.</li> </ul>	

Source: Adapted from Elementary Mathematics Specialists & Teacher Leaders Project. (n.d.). Common Core Look-Fors. Unpublished document. Used with permission. Previously published by Bay-Williams, J., McGatha, M., Kobett, B., and Wray, J. (2014). *Mathematics Coaching: Resources and Tools for Coaches and Leaders, K-12*. New York, NY: Pearson Education, Inc.