

Common Core Mathematics Practices: “Look Fors” and Discussion Points

Teacher:

Grade Level/Subject:

Observer:

Date:

What to Look for in Classrooms:

Elements and Indicators	Record of Planning and Instruction <i>How is instruction linked to the focus standard(s) and learning targets? What was discussed and/or observed?</i>
<p>1. Make sense of problems and persevere in solving them</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students describe what a problem means/is asking for. <input type="checkbox"/> Students look for an entry point into solving the problem. <input type="checkbox"/> Students make connections between the variables within a problem. 	
<p>2. Reason abstractly and quantitatively</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students are able to translate a problem situation into a number sentence and, after they solve the <i>arithmetic</i> part, recognize that the units in the problem make sense. 	
<p>3. Construct viable arguments and critique the reasoning of others</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students are able to come up with an example to support their idea of how to solve a math problem and can recognize additional examples that would also work. <input type="checkbox"/> Students can justify their conclusions, communicate them to others, and respond to the arguments of others with mathematical justifications. 	
<p>4. Model with mathematics</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students can apply the mathematics they know to solve problems relating to their daily lives. <input type="checkbox"/> Application may include equations, graphs, or other visual representations. 	
<p>5. Use appropriate tools strategically</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students demonstrate the use of manipulatives, rulers, compasses, protractors, and other tools to aid them in their problem-solving processes. <input type="checkbox"/> Students are sufficiently familiar with the tools appropriate for their grade level to make sound decisions about when each of these tools might be helpful and when their use is unnecessary. 	

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<p>6. Attend to precision</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students use clear definitions in discussion with others and in their own reasoning. <input type="checkbox"/> Students can state the meaning of the symbols they choose. <input type="checkbox"/> Students specify units of measure when labeling. <input type="checkbox"/> Students calculate accurately and efficiently, expressing numerical understanding appropriate for the problem context. 	
<p>7. Look for and make use of structure</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students engage with mathematical practices that require them to reason about the underlying mathematical concepts, structure, or pattern within a mathematics situation. <input type="checkbox"/> Students step back for an overview, shift perspective, or see something as a whole, as a combination of parts, or in a different way. 	
<p>8. Look for and express regularity in repeated reasoning</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students demonstrate the capacity to identify and evaluate efficient strategies for finding a solution to a problem with similar underlying structures to others they have solved. <input type="checkbox"/> Students look for general methods and shortcuts. Typically, students use previously explored mathematical strategies to solve a new problem with a similar method. 	