

Math Exemplars: A Perfect Complement for the Common Core

Aligned to CCSS

Exemplars authentic performance materials promotes critical thinking and reasoning and are an effective resource in meeting the **Common Core State Standards (CCSS)**.

The CCSS for Mathematical Practice are comprised of:	<i>Exemplars</i> rubric criteria from the “Practitioner Level” supports CCSS by requiring students to do the following in order to meet the standard:
<p>1) MAKE SENSE OF PROBLEMS AND PERSEVERE IN SOLVING THEM.</p>	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> • A correct strategy is chosen based on mathematical situation in the task. • Evidence of solidifying prior knowledge and applying it to the problem-solving situation is present. • Planning or monitoring of a strategy is evident <p><u>Reasoning and Proof</u></p> <ul style="list-style-type: none"> • A systematic approach and/or justification of correct reasoning is present. <p><u>Connections</u></p> <ul style="list-style-type: none"> • Clarification is made of the mathematical or situational context of the task. • An exploration of mathematical phenomenon is made in the context of the broader topic in which the task is situated. <p><u>Representation</u></p> <ul style="list-style-type: none"> • An appropriate and accurate mathematical representation is constructed and refined to solve problems or portray solutions.
<p>2) REASON ABSTRACTLY AND QUANTITATIVELY.</p>	<p><u>Reasoning and Proof</u></p> <ul style="list-style-type: none"> • Arguments are constructed with adequate mathematical basis. • A systematic approach and/or justification of correct reasoning is present. <p><u>Representation</u></p> <ul style="list-style-type: none"> • An appropriate and accurate mathematical representation is constructed and refined to solve problems or portray solutions. <p><u>Connections</u></p> <ul style="list-style-type: none"> • Clarification is made of the mathematical or situational context of the task. • An exploration of mathematical phenomenon is made in the context of the broader topic in which the task is situated. <p><u>Communication</u></p> <ul style="list-style-type: none"> • Formal math language is used to share and clarify ideas.
<p>3) CONSTRUCT VIABLE ARGUMENTS AND CRITIQUE THE REASONING OF OTHERS.</p>	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> • Evidence of solidifying prior knowledge and applying it to the problem-solving situation is present. <p><u>Reasoning and Proof</u></p> <ul style="list-style-type: none"> • Arguments are constructed with adequate mathematical basis. • A systematic approach and/or justification of correct reasoning are/is present. <p><u>Communications</u></p> <ul style="list-style-type: none"> • A sense of audience or purpose is communicated. • Communication of an approach is evident through a methodical, organized, coherent sequenced and labeled response. <p><u>Connections</u></p> <ul style="list-style-type: none"> • Clarification is made of the mathematical or situational context of the task. • An exploration of mathematical phenomenon is made in the context of the broader topic in which the task is situated. <p><u>Representation</u></p> <ul style="list-style-type: none"> • An appropriate and accurate mathematical representation is constructed and refined to solve problems or portray solutions.

(over)

The CCSS for Mathematical Practice are comprised of:	<i>Exemplars</i> rubric criteria from the “Practitioner Level” supports CCSS by requiring students to do the following in order to meet the standard:
4) MODEL WITH MATHEMATICS	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> Evidence of solidifying prior knowledge and applying it to the problem-solving situation is present. Planning or monitoring of strategy is evident. <p><u>Reasoning and Proof</u></p> <ul style="list-style-type: none"> Arguments are constructed with adequate mathematical basis. A systematic approach and/or justification of correct reasoning are/is present. <p><u>Representation</u></p> <ul style="list-style-type: none"> An appropriate and accurate mathematical representation is constructed and refined to solve problems or portray solutions. <p><u>Connections</u></p> <ul style="list-style-type: none"> Clarification is made of the mathematical or situational context of the task. An exploration of mathematical phenomenon is made in the context of the broader topic in which the task is situated. <p><u>Communication</u></p> <ul style="list-style-type: none"> Formal math language is used throughout the solution to share and clarify ideas.
5) USE APPROPRIATE TOOLS STRATEGICALLY	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> A correct strategy is chosen based on the mathematical situation in the task. Evidence of solidifying prior knowledge and applying it to the problem-solving situation is present. Planning or monitoring of strategy is evident.
6) ATTEND TO PRECISION.	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> The Practitioner must achieve a correct answer. <p><u>Representation</u></p> <ul style="list-style-type: none"> An appropriate and accurate mathematical representation is constructed and refined to solve problems or portray solutions. <p><u>Communication</u></p> <ul style="list-style-type: none"> A sense of audience or purpose is communicated. Communication of an approach is evident through a methodical, organized, coherent sequenced and labeled response. Formal math language is used throughout the solution to share and clarify ideas. At least two formal math terms or symbolic notations are evident, in any combination.
7) LOOK FOR AND MAKE USE OF STRUCTURE.	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> Planning or monitoring of strategy is evident. <p><u>Connections</u></p> <ul style="list-style-type: none"> Clarification is made of the mathematical or situational context of the task. An exploration of mathematical phenomenon is made in the context of the broader topic in which the task is situated. <p><u>Connections</u></p> <ul style="list-style-type: none"> A mathematical connection is made. Proper contexts are identified that link both the mathematics in the situation and the task.
8) LOOK FOR AND EXPRESS REGULARITY IN REPEATED REASONING.	<p><u>Problem Solving</u></p> <ul style="list-style-type: none"> Planning or monitoring of strategy is evident. <p><u>Connections</u></p> <ul style="list-style-type: none"> A mathematical connection is made. Patterns, structures and regularities are noted.

Contact us for more information at 800-450-4050 or visit us online at www.exemplars.com to download FREE samples.