

## Inquiry Five Strategies and The Common Core State Standards: Mathematical Practice

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Strategy #1: Get Personal How will you reinforce emotional bonds with and among students and with the lesson content [What relevant stories can you share or additional connections you can help make]?	CCSS.MATH.PRACTICE.MP4 Model with mathematics.  Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.
Strategy #2: Ask More; Talk Less When and how will you offer students opportunities to discuss and think aloud in pairs, small or large groups [Turn & Talk; instructional conversations] What 'essential' or open-ended and higher-level questions will frame this lesson?	CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.  Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution.  Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.
Strategy #3: Encourage Evidence How and when will students be asked to cite sources and back up their claims or hypotheses? How and when will you share your own evidence?	CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.  They justify their conclusions, communicate them to others, and respond to the arguments of others.
Strategy #4: Maintain Neutrality How will you react to 'off track' or 'on track' answers so your reaction increases students' willingness to take intellectual risks? [Thanking the student for their idea; asking follow-up questions; asking other students to weigh-in and respond]	CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.  Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.
Strategy #5: Extend Thinking Time What strategies will you use to offer students time to reflect and think through difficult questions and problems independently?	CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.  Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved.

The knowledge and skills students need to be prepared for mathematics in college, career, and life are woven throughout the mathematics standards. They do not include separate Anchor Standards like those used in the ELA/literacy standards, nor do they include the following four practices: CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically, CCSS.MATH.PRACTICE.MP6 Attend to precision, CCSS.MATH.PRACTICE.MP7, Look for and make use of structure, CCSS.MATH.PRACTICE.MP8 Look for and express regularity in repeated reasoning.