<table>
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<th>Math Practice</th>
<th>Select a Math Task that...</th>
<th>Make Teacher Moves that...</th>
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</table>
| #1 Make sense of problems and persevere in solving them. | • Has more than one entry point  
• Has multiple solution paths  
• Cognitively challenging, not obvious, not overly-scaffolded  
• Requires balance of procedural fluency and conceptual understanding  
• Requires students to justify solution using other solution methods | • Structure individual think time and student-student talk time.  
• Allow time for students to struggle (make sense, get-stuck-and-persevere), without “rescuing.”  
• Probe student reasoning and justification.  
• Build in time for metacognition (think about and discuss solution process). |
| #2 Reason abstractly and quantitatively.           | • Has a relevant, realistic context  
• Can be expressed with multiple representations  
• Requires students to frame solution in a context | • Expect students to interpret, model, and connect multiple representations.  
• Prompt students to articulate connections between context and representations.  
• Provide minimal scaffolding to support connections to the context. |
| #3 Construct viable arguments and critique the reasoning of others. | • Is clearly stated  
• Is grade level appropriate  
• Avoids single steps or routine algorithms | • Help students differentiate between assumptions and logical conjectures.  
• Model and prompt students to evaluate peer arguments.  
• Expect students to formally justify their conjectures. |
| #4 Model with mathematics.                         | • Illustrates the relevance of the math  
• Requires students to...  
  o identify variables and extraneous information  
  o compute & interpret results, report with multiple representations, and justify reasonableness of results | • Expect students to (or ask questions to help students) identify variables and procedures.  
• Expect students to (or facilitate discussions) evaluate the appropriateness of the model. |
| #5 Use appropriate tools strategically.            | • Lends itself to (or requires) using multiple learning tools  
• Gives students opportunity to develop (or requires the use of) fluency in estimation and mental computations | • Allow students to choose (and state why) appropriate learning tools.  
• Encourage creative tool alternatives.  
• Expect (or model) error checking by estimation. |
| #6 Attend to precision.                           | • Contains precise, not wordy, instructions  
• Includes assessment criteria for communication of ideas | • Demonstrate consistent expectation for precision in communication and solutions.  
• Encourage student identification of incomplete aspects of process or solution. |
| #7 Look for and make use of structure.             | • Requires students to analyze task before automatically applying an algorithm  
• Requires students to identify and compare the merits of different approaches | • Question students about...  
  o ...reasonable intermediate results?  
  o ...justify algorithm or solution path?  
• Prompt students to identify mathematical structures in symbolic expressions, geometric figures, graphs, tables, etc. |
| #8 Look for and express regularity in repeated reasoning. | • Lends itself to (or requires) recognition of pattern or structure  
• Connects to prior knowledge or future concepts in a cumulative, but non-routine way | • Help students understand why procedural shortcuts work.  
• Prompt students (or model) to make explicit, conceptual connections between prior and/or future concepts. |

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1 Adapted from “Rubric—Implementing Standards for Mathematical Practice,” Park City Math Institute, 2011