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.

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| ***Mathematical Practice*** | ***Student Look Fors*** | ***Examples*** |
| 1. Make sense of problems and persevere in solving them. | * Analyze information (givens, constraints,   relationships, goals).   * Make conjectures and plan a solution   pathway.   * Use objects, drawings, and diagrams to   solve problems.   * Monitor progress and change course as   necessary.   * Check answers to problems and ask,   “Does this make sense?” |  |
| 2. Reason abstractly and quantitatively. | * Make sense of quantities and relationships   in problem situations.   * Create a coherent representation of a   problem.   * Translate from contextualized to   generalized or vice versa.   * Flexibly use properties of operations. |  |
| 3. Construct viable arguments and critique the reasoning of others. | * Make conjectures and use   counterexamples to build a logical progression of statements to support  ideas.   * Use definitions and previously established   results.   * Listen to or read the arguments of others. * Ask probing questions to other students. |  |
| 4. Model with mathematics. | * Determine equation that represents a   situation.   * Illustrate mathematical relationships   using diagrams, two-way tables, graphs,  flowcharts, and formulas.   * Check to see whether an answer makes   sense within the context of a situation and  change a model when necessary. |  |

Retrieved from the companion website for *Everything You Need for Mathematics Coaching: Tools, Plans, and A Process That Works: Grades K–12* by Maggie B. McGatha and Jennifer M. Bay-Williams with Beth McCord Kobett and Jonathan A. Wray. Thousand Oaks, CA: Corwi[n, www.corwin.com.](http://www.corwin.com/) Copyright © 2018 by Corwin. All rights reserved. Reproduction authorized only for the local school site or nonprofit organization that has purchased this book.

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| ***Mathematical Practice*** | ***Student Look Fors*** | ***Examples*** |
| 5. Use appropriate tools strategically. | * Choose tools that are appropriate for the   task (e.g., manipulative, calculator, digital  technology, ruler).   * Use technological tools to visualize   the results of assumptions, explore consequences, and compare predictions  with data.   * Identify relevant external math resources   (digital content on a website) and use them to pose or solve problems. |  |
| 6. Attend to precision. | * Communicate precisely using appropriate   terminology.   * Specify units of measure and provide   accurate labels on graphs.   * Express numerical answers with   appropriate degree of precision.   * Provide carefully formulated explanations. |  |
| 7. Look for and make use of structure. | * Notice patterns or structure, recognizing   that quantities can be represented in  different ways.   * Use knowledge of properties to efficiently   solve problems.   * View complicated quantities both as single   objects and as compositions of several objects. |  |
| 8. Look for and express regularity in repeated reasoning. | * Notice repeated calculations and look for   general methods and shortcuts.   * Maintain oversight of the process while   attending to the details.   * Evaluate reasonableness of intermediate   and final results. |  |

*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.