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| CCSSO Standards for Mathematical Practice Student “Look-Fors” |  | CCSSO Standards for Mathematical Practice Student “Look-Fors” |
| **1. Make sense of problems and persevere in solving them** * Consider or attempt multiple entry points
* Analyze information (givens, constrains, 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?”
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| **2. Reason abstractly and quantitatively** * Make sense of quantities and relationships in problem situations
* Represent abstract situations symbolically
* Create a coherent representation of the problem
* Translate from contextualized to generalized or vice versa
* Flexibly use properties of operations
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| **3. Construct viable arguments and critique the reasoning of others** * Use definitions and previously established causes/effects (results) in constructing arguments
* Make conjectures and use counterexamples to build a logical progression of statements to explore and support their ideas
* 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
* Apply assumptions to make a problem simpler
* Check to see if an answer makes sense within the context of a situation and change a model when necessary
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| **5. Use appropriate tools strategically*** Choose tools that are appropriate for the task.

Examples: *Manipulative, Calculator, Ruler, Digital Technology** Use technological tools to visualize the results of assumptions, explore consequences and compare predications with data
* Identify relevant external math resources (digital content on a website) and use them to pose or solve problems
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| **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
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| **7. Look for and make use of structure.*** Look for 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 or compositions of several objects
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| **8. Look for and express regularity in repeated reasoning*** Notice repeated calculations and look for general methods and shortcuts
* Continually evaluate the reasonableness of intermediate results while attending to details and make generalizations based on findings
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