

	5	4	3	2	1
When presented with a problem, I can make a plan, carry out my plan, and evaluate its success, persevering through difficulty.	Explains and demonstrates solution with multiple representations, learning from struggle from previous solution attempts	Explains and demonstrates solution one way	Explains or demonstrates solution	Demonstrates solution through math work only	Struggles to persevere in finding a solution for the problem
I can contextualize numbers, decontextualize words, and use reasoning habits to make sense of problems.	Explains the conversion between situations and expressions to connect the meaningful context to the mathematical representation.	Converts situations into expressions to appropriately solve problems or convert mathematical expressions into meaningful situations	Translates situations into symbols for solving problems	Reasons with models or pictorial representation to solve problems	Struggles to represent the problem
I can present and prove my thinking and critique the reasoning of others.	Justifies and explains, with accurate language and vocabulary, why their solution is correct	Explains thinking with accurate vocabulary	Explains thinking without using mathematically precise language	Demonstrates solution through math work only	No proof of thinking (explanation or math work) shown for answer
I can represent the use of mathematical tools to assist in my problem solving.	Uses a variety of models and symbolic representations to demonstrate a solution to the problem	Uses models and symbols to represent and solve a problem and accurately explains the solution representation	Uses models to represent and solve a problem and translate the solution to mathematical symbols	Demonstrates solution through math work only	Lacks representation of problem
I can use precision when solving problems and communicating my ideas.	Uses appropriate symbols, vocabulary, and labeling to effectively communicate and exchange ideas	Incorporates appropriate vocabulary and symbols	Communicates ideas without appropriate vocabulary and symbols	Demonstrates solution through math work only	Lacks communication of ideas
I can see how mathematical ideas are organized together to create connections between concepts.	Represents complex and complicated math expressions as component parts	Composes and decomposes number situations and relationships through observed patterns in order to simplify solution	Identifies structure to help them solve problem effectively	Only one representation of ideas is given, so no connections can be made	Lacks communication of ideas
I can recognize repetition and utilize more efficient methods of solving problems.	Discovers deep, underlying relationships that unify the various aspects of a problem	Identifies obvious and intricate patterns within the problem	Explains subtle patterns	Looks for obvious patterns and uses if/then reasoning strategies for obvious patterns.	Fails to identify any patterns that may help solve problem
Literacy Conventions & Presentation	I am confident and knowledgeable in my properly organized response: introduction, evidence and reasoning, conclusion. I write with interesting and varied sentence structure, in which I use proper spelling, capitalization, punctuation, and grammar.	Writing includes proper spelling, capitalization, punctuation, and grammar.	Writing may include some spelling, capitalization, punctuation, and grammar errors.	Writing includes incomplete or run-on sentences	Response lacks written communication of ideas