MATHEMATICS

Mathematical Reasoning

Grade K	Grade 1	Grade 2
1. Students make decisions about how to set up a problem. k.1.1 decide about the approach, materials and strategies to use k.1.2 use tools and strategies such as manipulatives or sketches to model problems	**1. Students make decisions about how to set up a problem.** 1.1.1 decide about the approach, materials and strategies to use 1.1.2 use tools and strategies such as manipulatives or sketches to model problems	**1. Students make decisions about how to set up a problem.** 2.1.1 decide about the approach, materials and strategies to use 2.1.2 use tools and strategies such as manipulatives or sketches to model problems
2. Students solve problems in reasonable ways and justify reasoning. k.2.1 explain the reasoning used with concrete objects and pictorial representations k.2.2 make precise calculations and check the validity of the results from the context of the problem	**2. Students solve problems and justify their reasoning.** 1.2.1 explain the reasoning used and justify the procedures selected 1.2.2 make precise calculations and check the validity of the results from the context of the problem	**2. Students solve problems and justify their reasoning.** 2.2.1 defend the reasoning used and justify the procedures selected 2.2.2 make precise calculations and check the validity of the results from the context of the problem
	3. Students note connections between one problem and another.	**3. Students note connections between one problem and another.**
	4. Students communicate their knowledge of basic skills, conceptual understanding, and problem solving and demonstrate their understanding of mathematical communications of others. 1.4.1 use appropriate mathematical vocabulary; for example, words for simple shapes, attributes, and numbers	**4. Students communicate their knowledge of basic skills, conceptual understanding, and problem solving and demonstrate their understanding of mathematical communications of others.** 2.4.1 use appropriate mathematical vocabulary; for example, words for simple shapes, attributes, and numbers