Grade 5: Concepts and Procedures Target A & B: Operations and Algebraic Thinking

Student Just Entering Standard Nearly Met Should Be Able To:

- Write numerical expressions having one set of parentheses, brackets, or braces.

- Graph whole number ordered pairs from two whole number numerical patterns on a coordinate plane.

Student Just Entering Standard Met Should Be Able To:

- Write and interpret expressions with two different operations.

- Compare two related numerical patterns within sequences and tables.

Student Just Entering Standard Exceeded Should Be Abe To:

- Compare two related numerical patterns and explain the relationship within sequences of ordered pairs that are rational numbers.

Grade 5: Concepts and Procedures Targets C & D: Number and Operations – Base Ten

Student Just Entering Standard Nearly Met Should Be Able To:

- Understand that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right.

- Demonstrate accuracy in multiplying multi-digit whole numbers and in finding whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors.

Student Just Entering Standard Met Should Be Able To:

- Use whole number exponents to denote powers of 10; round decimals to the thousandths; and read, write, and compare decimals to the thousandths using base-ten numerals, number names, and expanded form, using >, =, and < to record the results of the comparison.

- Fluently multiply multi-digit whole numbers and find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors.

- Perform the four operations on decimals to the hundredths.

- Relate a strategy to a written method and explain the reasoning used.

Student Just Entering Standard Exceeded Should Be Abe To:

- Combine multiplying by powers of 10, comparing, and rounding to highlight essential understandings

Grade 5: Concepts and Procedures Target E & F: Number and Operations–Fractions

Student Just Entering Standard Nearly Met Should Be Able To:

- Add two fractions and/or mixed numbers with unlike denominators (denominators less than or equal to 6) in mathematical problems.

- Use benchmark fractions to estimate and assess the reasonableness of answers (denominators less than or equal to 6).

- Multiply a whole number by a mixed number.

- Know the effect that a fraction greater than or less than 1 has on a whole number when multiplied.

- Use visual models when multiplying two fractions between 0 and 1.

- Perform division of a whole number by any unit fraction.

- Understand that division of whole numbers can result in fractions.

Student Just Entering Standard Met Should Be Able To:

- Use whole number exponents to denote powers of 10; round decimals to the thousandths; and read, write, and compare decimals to the thousandths using base-ten numerals, number names, and expanded form, using >, =, and < to record the results of the comparison.

- Fluently multiply multi-digit whole numbers and find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors.

- Perform the four operations on decimals to the hundredths.

- Relate a strategy to a written method and explain the reasoning used.

Student Just Entering Standard Exceeded Should Be Abe To:

- Use or create visual models when multiplying two fractions that are larger than 1.

Grade 5: Concepts and Procedures Targets G, H & I: Measurement and Data

Student Just Entering **Standard Nearly Met** Should Be Able To:

- Convert a whole number measurement to a decimal or fractional valued measurement within the same system (e.g., 30 in = ____ft).

- Make a line plot and display data sets in whole and half units.

- Understand the concept that the volume of a rectangular prism packed with unit cubes is related to the edge lengths.

Student Just Entering **Standard Met** Should Be Able To:

- Convert from a smaller unit of measurement to a larger one, resulting in one decimal place (metric system) or a small denominator fraction (standard system).

- Make a line plot to display data sets in fractions of a unit (1/2, 1/4, 1/8).

- Solve one-step problems using information from line plots that require addition, subtraction, and multiplication of fractions.

- Use V = lwh and V = Bh to find the volume of rectangular prisms.

Student Just Entering **Standard Exceeded** Should Be Abe To:

- Find the volume of a right rectangular prism after doubling the edge length of a side with a whole number measurement and compare it to the original.

Grade 5: Concepts and Procedures Target J & K: Geometry

Student Just Entering Standard Nearly Met Should Be Able To:

- Graph whole number coordinate pairs on a coordinate plane with whole number increments of 2, 5, and 10.

- Classify two-dimensional figures into categories by their attributes or properties.

Student Just Entering Standard Met Should Be Able To:

- Graph coordinate pairs where one term is a whole number and one is a fraction with a denominator of 2 or 4 on a coordinate plane with whole number axis increments.

- Classify two-dimensional figures into subcategories by their attributes or properties.

Student Just Entering Standard Exceeded Should Be Abe To:

- Graph coordinate pairs where one term is a whole number and one is a fraction on a coordinate plane with fractional axis increments of 1/2, 1/4, or 1/10.

Grade 5: Problem Solving / Modeling and Data Analysis

Student Just Entering Standard Nearly Met Should Be Able To:

- Select tools to solve a familiar and moderately scaffolded problem and apply them with partial accuracy.

- Use the necessary elements given in a problem situation to solve a problem.

- Apply mathematics to propose solutions by identifying important quantities and by locating missing information from relevant external resources.

Student Just Entering Standard Met Should Be Able To:

- Use appropriate tools to accurately solve problems arising in everyday life, society, and the workplace.
- Apply mathematics to solve problems by identifying important quantities and mapping their relationship and by stating and using logical assumptions.

Student Just Entering Standard Exceeded Should Be Abe To:

- Analyze and interpret the context of an unfamiliar situation for problems of increasing complexity.
- Begin to solve problems optimally.
- Construct multiple plausible solutions and approaches.

Grade 5: Communicating Reasoning

Student Just Entering Standard Nearly Met Should Be Able To:

- Find and identify the flaw in an argument.

Student Just Entering Standard Met Should Be Able To:

- Use stated assumptions, definitions, and previously established results and examples to identify and repair a flawed argument.

- Use previous information to support his or her own reasoning on a routine problem.

Student Just Entering Standard Exceeded Should Be Abe To:

- Begin to construct chains of logic about abstract concepts autonomously.