Enduring Understandings   **Essential Questions**   **Indicators**

| 3.6.2.1 select tools and units to measure accurately in given situations. |

Selection of standard measurement tools and units depend on the real world situation.

Why are specific units and tools used to measure different attributes?

| 3.6.2.2 compare, convert, and estimate units of measure of length, time, weight, mass, capacity, and volume within the same measurement system. |

What determines a reasonable estimation for a given situation?

| 3.6.2.3 compare relative sizes of both customary and metric units. |

Computational estimations produce approximate results.

What is the purpose of estimation?

| 6.6.7.1 use estimation and mental math to solve problems with fractions, decimals, and percents, explaining the reasoning involved. |

How can estimation skills and algorithms reinforce one another?

| 6.6.5.1 add, subtract, multiply, and divide with decimals and fractions, including mixed numbers, expressing answers in simplest form. |

Multiplication does not always make larger and division does not always make smaller.

How do operations with decimals compare to operations with whole numbers?

| 6.6.7.2 determine equivalent ratios, decimals, and percents. |

How do operations with fractions compare to operations with whole numbers and decimals?

Fractions, decimals, and percents can be used interchangeably.

| 6.6.7.3 determine ratios, rates, and unit rates in the context of a problem. |

What determines an appropriate representation of a number?

| 6.6.2.1 compare, order, and describe rational numbers in equivalent forms. |

Enduring Understandings	Essential Questions	Indicators
The degree of precision in measurements depends on the measurement tool.	What determines the degree of precision of a measurement?	3.7.2.1 select tools and units to measure accurately and determine the degree of precision.
		3.7.2.2 demonstrate an understanding of precision, error, and tolerance in measurement.
Integers have magnitude and direction.	How do operations with integers compare to operation with whole numbers?	6.7.5.1 model and explain the addition, subtraction, multiplication, and division of integers.
		6.7.5.2 add, subtract, multiply, and divide integers.
Algebraic representations generalize patterns and relationships.	Why are mathematical rules necessary?	
		6.7.2.2 determine the absolute value of rational numbers.
A ratio is a multiplicative comparison of two quantities.	How are comparisons used in proportional reasoning?	3.7.4.2 write, solve, and apply proportions.
		6.7.7.2 use strategies to solve problems involving rations, proportions, and percent.
Proportional reasoning involves comparisons of the relationships among ratios.	How is proportional reasoning of geometric figures used to solve problems?	6.7.7.1 use estimation to solve problems involving proportional reasoning.
		2.7.5.3 define and apply properties of similar figures.
	What kinds of questions can be answered using proportional reasoning?	3.7.4.1 use ratios and proportions to create scale drawings and models.
		3.7.4.3 read and interpret drawings and models made to scale.