Core Content

Cluster Title: Convert like measurement units within a given measurement system.
Standard 1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m) and use these conversions in solving multi-step, real world problems.
MASTERY Patterns of Reasoning:
Conceptual: Students understand how to convert different-sized standard measurement units within a given measurement system (customary and metric). **Procedural:** Students can convert and apply measurement units within a given measurement system. Students can translate relationships between measurement units (e.g., 1 yd. to 3 ft. and 5 cm to 0.05 m). **Representational:** Students can use appropriate tools, models, and symbols to accurately convert from one unit of measure to another and properly label the results.

Supports for Teachers

Critical Background Knowledge
Conceptual: Students understand the relationship within measurement systems (capacity, length and mass). **Procedural:** Students can use conversions within a measurement system involving multi-step and real-world problems. **Representational:** Students understand appropriate use of measurement tools. Students can recognize uses of measurement in everyday situations.

Academic Vocabulary and Notation	
All units of measurement in the customary and metric systems, including: kilometer, meter, centimeter, millimeter, liter, milliliter, kilogram, gram, milligram, mile, yard, foot, inch, gallon, quart, pint, cup, ton, pound, and ounce as well as abbreviations for symbols (“ = in., ‘ = ft.)	
Instructional Strategies Used	**Resources Used**
A variety of situations involving measuring and converting. Examples: 1. Convert yards to miles (e.g., 440 yds. = ¼ mile, 1,760 yds. = 1 mile). 2. Measure in metric units using strings, meter sticks, measuring tapes, trundles wheels, scale, pop bottles, measuring cups, etc., and convert within the system.	
Assessment Tasks Used	
Skill-Based Task: Convert the following: • meters to kilometers • yards to miles • grams to kilograms • ounces to pounds • cups to gallons	**Problem Task:** A fifth grade class is running a 5k race. The class will begin practicing to increase their endurance, starting with 1,500 meters and adding 500 meters each week. How many weeks will it take to be ready for the race? A fifth grade class is running a three-mile race. The class will begin practicing to increase their endurance, starting with 880 yards and adding 440 yards per week. How many weeks will it take to be ready for the race? Zuri, the baby elephant, was born August 10, 2009 at Hogle Zoo. The calf weighed 251 lbs. at birth. If the baby elephant gains 48 ounces a day, how much will she weigh at the end of 7 days?