Grade 3 Mathematics – Unit 8: Metric Measurement

Phoenixville Area School District

Stage 1 Desired Results

PA Core Standards:
CC.2.4.3.A.1Solve problems involving measurement and estimation of temperature, liquid volume, mass, and length.

PSSA Assessment Anchors:
M03.D-M.1 Solve problems involving measurement and estimation of intervals of time, money, liquid volumes, masses, and lengths of objects.

M03.D-M.1.2 Use the attributes of liquid volume, mass, and length of objects.

Transfer

TRANSFER GOALS
Students will be able to independently use their learning to…

- Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns.
- Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems.
- Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale.

Meaning

UNDERSTANDINGS
Students will understand that…

- Numerical quantities, units, and measurements can be exchanged/converted using appropriate calculations.

ESSENTIAL QUESTIONS
Students will keep considering...

- How can different units within a given measurement system be used to represent the same quantity?

Knowledge and Skills Acquisition

KNOWLEDGE
Students will know…

- Centimeters, meters and kilometers are used to measure length
- Grams and kilograms are used to measure mass/weight
- Liters and milliliters are used to measure volume
- The relationship between metric units for length, mass and volume

SKILLS
Students will be skilled at…

- Measuring lines to the nearest centimeter in selected response questions.
- Reading various pictures of calibrated scales to the nearest gram or kilogram verbally and in selected response questions.
- Reading various pictures of measuring cups to the nearest liter or milliliter verbally and in selected response questions.

	• Estimate distances, masses or volumes using the most appropriate unit VOCABULARY • Centimeters / Meters / Kilometers • Gram / Kilogram • Liter / Milliliter • Volume • Capacity	• Converting metric units to find equivalent units in selected response, open-ended and performance-based tasks. • Estimating distances, masses or volumes using the most appropriate unit verbally and in selected and open-ended responses.

Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
A/M/T Acquisition Meaning Making Transfer	*What criteria will be used in each assessment to evaluate attainment of the desired results?*	PERFORMANCE TASK(S) **No Performance Task for this Unit.**	Differentiation Considerations:
A/M/T Acquisition Meaning Making Transfer	*What criteria will be used in each assessment to evaluate attainment of the desired results?*	OTHER EVIDENCE • District Created Measurement Test (chapter 8) • Teacher Observation • Teacher created quizzes • Small Group Work	Differentiation Considerations: Small Group reteaching Enrichment/Challenge opportunities