Mar. Gr 4 My Math Unit 11: Customary Measurement

Content Area: **Math**
Course(s):
Time Period: **March**
Length: **4-5 Weeks**
Status: **Obsolete**

Unit Overview

Students will learn about customary measurements.

Enduring Understandings

We can convert customary measures of length, capacity and weight.

We can convert units of time.

We can use a line plot to represent measurement data involving fractions.

Essential Questions

How do we convert measurements?

Instructional Strategies & Learning Activities

Pacing Guide
Suggested Pacing

Instruction	11 days
Review/Assessment	2 days
Total*	13 days

*Includes additional time for remediation and differentiation.

Lesson	Objective	Material & Manipulatives	Vocabulary	CCSS Standard
Lesson 1 *pp. 697-702* Customary Units of Length	Estimate and measure length using customary units.		customary system foot yard	4.MD.1 4.MD.2

				Supporting Cluster MP 1, 4, 5, 6, 7
Lesson 2 *pp. 703-708* Convert Customary Units of Length	Convert customary units of length.	• play money	convert mile	4.MD.1 4.MD.2 Supporting Cluster MP 1, 2, 3, 4, 5, 6, 7
Lesson 3 *pp. 709-714* Customary Units of Capacity	Estimate and measure customary capacities.	• measuring cups • water, sand, or rice	capacity cup fluid ounce gallon pint quart	4.MD.1 4.MD.2 Supporting Cluster MP 1, 2, 3, 4, 6, 8
Lesson 4 *pp. 715-720* Convert Customary Units of Capacity	Convert customary units of capacity.	• measurement containers (cup, pint, quart, gallon)		4.MD.1 4.MD.2 Supporting Cluster MP 1, 2, 3, 5, 6, 8
		Check My Progress		
Lesson 5 *pp. 723-728* Customary Units of Weight	Estimate and measure customary units of weight.	• bucket balance • 1-pound weights	ounce pound ton weight	4.MD.1 4.MD.2 Supporting Cluster MP 1, 2, 3, 5, 6
Lesson 6 *pp. 729-734* Convert Customary Units of Weight	Convert customary units of weight.	• bucket balance • set of weights		4.MD.1 4.MD.2 Supporting Cluster MP 1, 2, 3, 4, 6, 7, 8
Lesson 7 *pp. 735-740* Convert Units of Time	Convert units of time.	• stopwatches	seconds	4.MD.1 4.MD.2 Supporting Cluster MP 3, 4, 5, 6, 7

		Check My Progress		
Lesson 8 *pp. 743-748* Display Measurement Data in a Line Plot	Display measurement data in a line plot.	• rulers	line plot	4.MD.4 Supporting Cluster MP 1, 2, 3, 4, 5, 6, 7
Lesson 9 *pp. 749-754* Solve Measurement Problems	Solve problems involving measurement.	• construction paper • markers		4.MD.2 Supporting Cluster MP 1, 2, 3, 5
Lesson 10 *pp. 755-760* Problem-Solving Investigation: Guess, Check, and Revise	Solve problems using the guess, check, and revise strategy.			4.MD.2 Supporting Cluster MP 1, 3, 4, 5
		My Review and Reflect		

Integration of Career Readiness, Life Literacies and Key Skills

WRK.9.2.5.CAP	Career Awareness and Planning
WRK.9.2.5.CAP.1	Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.
WRK.9.2.5.CAP.2	Identify how you might like to earn an income.
WRK.9.2.5.CAP.3	Identify qualifications needed to pursue traditional and non-traditional careers and occupations.
WRK.9.2.5.CAP.4	Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.
TECH.9.4.5.CT	Critical Thinking and Problem-solving
TECH.9.4.5.CT.3	Describe how digital tools and technology may be used to solve problems.
TECH.9.4.5.CT.4	Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).
TECH.9.4.5.DC.4	Model safe, legal, and ethical behavior when using online or offline technology (e.g., 8.1.5.NI.2).
	An individual's passions, aptitude and skills can affect his/her employment and earning potential.

Technology and Design Integration

- SMARTboard technology
- Google Applications (documents, forms, spreadsheets, presentation)
- Dreambox
- Online textbook

CS.3-5.8.1.5.IC.1	Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.
CS.3-5.8.1.5.IC.2	Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.
CS.3-5.8.2.5.ED.4	Explain factors that influence the development and function of products and systems (e.g., resources, criteria, desired features, constraints).
CS.3-5.8.2.5.ITH.1	Explain how societal needs and wants influence the development and function of a product and a system.
CS.3-5.8.2.5.ITH.2	Evaluate how well a new tool has met its intended purpose and identify any shortcomings it might have.
CS.3-5.ITH	Interaction of Technology and Humans Societal needs and wants determine which new tools are developed to address real-world problems.

Interdisciplinary Connections

Leveled readers "Ancient Giants fo the Forest"

LA.RI.4.1	Refer to details and examples in a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.
LA.RI.4.4	Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
LA.SL.4.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

Differentiation

-Reteach Master

-Hands-On Activity

-Enrich Master

Modifications & Accommodations

IEP and 504 accommodations will be utilized.

Provide an outline of material to be covered

-Individualized assignments, e.g., length, number, due date, topic

-Allow student to use technology-online textbook

-Use of graphic organizers

-Use highlighter for key information

-Read directions, passages, and word problems aloud as needed-online presentation

-Use of calculator and matrix for multiplication and division

-Provide textbook in audio format

-Demonstrate directions and procedures/give examples

Benchmark Assessments

- Diagnostic
- Aimsweb
- End of Year Assessment

Formative Assessments

Check My Progress

-My Chapter Review

-Homework Practice

-Independent Practice

Summative Assessments

Chapter 11 asssessment

Instructional Materials

See instructional materials listed above.

Standards

MATH.4.M.A.1	Know relative sizes of measurement units within one system of units including km, m, cm, mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
MATH.4.M.A.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
MATH.4.DL.B.5	Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Solve problems involving addition and subtraction of fractions by using information presented in line plots.