# May Gr.2 Unit 11: Customary and Metric Lengths

Content Area:

Math

Course(s): Time Period:

Mav

Length: Status: 2-4 Weeks Obsolete

#### **Unit Overview**

This unit teaches customary and metric measurement.

### **Enduring Understandings**

Students will be able to specify units of measure throughout the chapter as they measure and compare the lengths of objects in customary and metric units. They will also be asked to determine which measurement unit is appropriate for the degree of precision needed in different contexts.

## **Essential Questions**

How do we measure lengths of objects?

## **Instructional Strategies & Learning Activities**

My Math Chapter 11

• Pacing Guide Suggested Pacing

Instruction 16 days Review/Assessment 2 days Total\* 18 days

• \*Includes additional time for remediation and differentiation.

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| Lesson               | Objective            | Material &<br>Manipulatives | Vocabular | y Standard           |
|----------------------|----------------------|-----------------------------|-----------|----------------------|
| Lesson 1 pp. 645-650 | Use an inch ruler to | • ruler                     | length    | 2.MD.1               |
| Inches               | measure objects.     |                             | inch      | 2.MD.3               |
|                      | -                    |                             | estimate  | 2.MD.5               |
|                      |                      |                             | measure   |                      |
|                      |                      |                             |           | <b>Major Cluster</b> |

| Lesson 2 pp. 651-656<br>Feet and Yards                                | Measure objects to find the relationship between inch, foot, and yard.   | <ul><li>ruler</li><li>yardstick</li></ul>   | foot<br>yard         | MP<br>1, 2, 3, 4, 5, 6<br>2.MD.1<br>2.MD.3<br>2.MD.5<br>Major Cluster              |
|---|--|---|----------------------|--|
| Lesson 3 pp. 657-662 Select and Use Customary Tools Check My Progress | Choose the appropriate tool and measure length.                          | <ul><li>yardstick</li><li>measuring tape</li><li>crayons</li><li>ruler</li></ul>      |                      | MP<br>1, 2, 3, 5, 6, 8<br>2.MD.1<br>2.MD.3<br>Major Cluster<br>MP<br>3, 4, 5, 6, 8 |
| Lesson 4 pp. 665-670<br>Compare Customary<br>Lengths                  | Measure to compare customary lengths.                                    | <ul><li>pencils</li><li>shoes</li></ul>   |                      | 2.MD.4  Major Cluster  |
| Lesson 5 pp. 671-676<br>Relate Inches, Feet,<br>and Yards             | Use measurement to relate inches, feet, and yards.                       | • tape measure  |                      | MP<br>1, 2, 3, 4, 6, 7, 8<br>2.MD.2<br>Major Cluster<br>MP                         |
| Lesson 6 pp. 677-682  Problem-Solving Strategy: Use Logical Reasoning | Use logical reasoning strategy to solve problems.                        | <ul><li> yardstick</li><li> balls of yarn or string</li></ul>                         |                      | 1, 2, 3, 7, 8<br>2.MD.5<br>Major Cluster<br>MP<br>1, 2, 3, 6                       |
| Check My Progress Lesson 7 pp. 685-690 Centimeters and Meters         | Use a centimeter ruler to measure objects.                               | <ul><li>• inch rulers</li><li>• centimeter rulers</li><li>• base-ten blocks</li></ul> | centimeter<br>meters | \$2.MD.1<br>2.MD.3<br>2.MD.5   |
| Lesson 8 pp. 691-696 Select and Use Metric Tools                      | Measure objects to find the relationship between centimeters and meters. | <ul> <li>base-ten blocks</li> <li>centimeter ruler</li> <li>meterstick</li> </ul>     |                      | Major Cluster MP 1, 2, 4, 6, 8 2.MD.1 2.MD.3 Major Cluster MP                      |
| Lesson 9 pp. 697-702<br>Compare Metric Length                         | Use measurement to compare metric  | • various objects for comparisons   |                      | 1, 2, 3, 5, 6<br>2.MD.4  |

|   | length.   |  | <b>Major Cluster</b>                                   |
|---|---|--|--|
| Lesson 10 pp. 703-708 Relate Centimeters and Meters | Use measurement to relate centimeters and meters. | <ul><li>yardstick</li><li>meterstick</li><li>centimeter ruler</li></ul>            | MP<br>1, 2, 3, 4, 5, 8<br>2.MD.2<br>Major Cluster      |
| Lesson 11 pp. 709-714  Measure on a Number Line     | Use a number line to measure.                     | • calendar   | MP<br>1, 2, 3, 4, 5, 8<br>2.MD.6<br>Major Cluster      |
| Lesson 12 pp. 715-720<br>Measurement Data           | Measure lengths to generate data.                 | <ul> <li>yard or meter<br/>measuring tape</li> <li>small slips of paper</li> </ul> | MP<br>1, 3, 4, 5, 6<br>2.MD.9<br>Supporting<br>Cluster |
| My Review and Reflect                               |   | • inch rulers  | MP<br>2, 3, 6, 7, 8                                    |

# Integration of Career Readiness, Life Literacies and Key Skills

| WRK.9.1.2.CAP.1 | Make a list of different types of jobs and describe the skills associated with each job.                            |
|-----------------|---|
| TECH.9.4.2.Cl.1 | Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).                |
| TECH.9.4.2.CI.2 | Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).   |
| TECH.9.4.2.CT.2 | Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).                        |
| TECH.9.4.2.CT.3 | Use a variety of types of thinking to solve problems (e.g., inductive, deductive).                                  |
| TECH.9.4.2.DC.3 | Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).     |
| TECH.9.4.2.DC.4 | Compare information that should be kept private to information that might be made public.                           |
|                 | Different types of jobs require different knowledge and skills.   |
|                 | Brainstorming can create new, innovative ideas.   |
|                 | Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem. |
|                 | Individuals should practice safe behaviors when using the Internet.   |

### **Technology and Design Integration**

Students will interact with the SmartBoard, Ipads, chromebooks and document camera.

CS.K-2.8.1.2.CS.1 Select and operate computing devices that perform a variety of tasks accurately and

quickly based on user needs and preferences.

Individuals use computing devices to perform a variety of tasks accurately and quickly.

Computing devices interpret and follow the instructions they are given literally.

## **Interdisciplinary Connections**

|           | <b>5</b>              |                      |  |
|-----------|-----------------------|----------------------|--|
| LA.RI.2.4 | Determine the meaning | of words and phrases | in a text relevant to a grade 2 topic or |

subject area.

LA.RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries,

indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

LA.RI.2.10 Read and comprehend informational texts, including history/social studies, science, and

technical texts, at grade level text complexity proficiently with scaffolding as needed.

LA.RF.2.3 Know and apply grade-level phonics and word analysis skills in decoding words.

#### **Differentiation**

Each My Math unit throughout the series offers "approaching level", "on level" and "Beyond level" differentiated instructional hands-on choices, as well as ELL differentiated support. Please refer to the teacher edition for the activities.

#### **Modifications & Accommodations**

EP and 504 accommodations will be followed.

#### **Benchmark Assessments**

**AIMSweb** 

#### **Formative Assessments**

Teacher observation

| Student conferences |  |
|---------------------|--|
| Discussion          |  |
| Activities          |  |
| games               |  |
| homework            |  |
| white board         |  |
|                     |  |
|                     |  |
|                     |  |

## **Summative Assessments**

My Math chapter assessments

**Instructional Materials**See materials listed in above plans.

## **Standards**

| MA.2.MD.A.1 | Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.  |
|-------------|--|
| MA.2.MD.A.2 | Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.  |
| MA.2.MD.A.3 | Estimate lengths using units of inches, feet, centimeters, and meters.   |
| MA.2.MD.A.4 | Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.  |
| MA.2.MD.B.5 | Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.             |
| MA.2.MD.B.6 | Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole-number sums and differences within 100 on a number line diagram.  |
| MA.2.MD.D.9 | Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. |
|             |  |