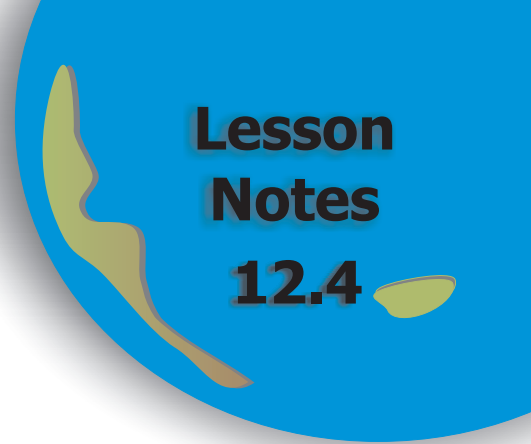


NAME \_\_\_\_\_

Module 12 Attributes and Tools  
Lesson 4 Measurement: Distance



**Lesson Objectives**

- Solve real-world problems involving distance.
- Draw and measure distance to the nearest cm and  $\frac{1}{4}$  inch, the nearest mm and  $\frac{1}{8}$  inch, and the nearest mm and  $\frac{1}{16}$  inch accurately.

**Subtopic 1**

**Draw and Measure Customary Distance/Length**

- 1** Find the diameter of a nickel to the nearest quarter inch and to the nearest sixteenth inch.



Nearest quarter inch:  $\frac{3}{4}$  in.  
Nearest sixteenth inch:  $\frac{13}{16}$  in.

- 2** Draw a line segment that is  $4\frac{5}{16}$  inches long.



- 3** Charlotte measured an  $8\frac{7}{16}$  inch feather. Find its length to the nearest eighth inch.

$8\frac{6}{16}$  in.    $8\frac{7}{16}$  in.    $8\frac{8}{16}$  in.  
 $8\frac{3}{8}$  in.    $8\frac{7}{16}$  in.    $8\frac{4}{8}$  in.  
 $8\frac{4}{8}$  in.

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**Subtopic 2** Draw and Measure Metric Distance/Length

- 4 Find the length of the battery to the nearest millimeter and centimeter.



Nearest mm: 4.7 cm or 47 mm  
Nearest cm: 5 cm

- 5 Draw a segment 5.8 centimeters long.



**Subtopic 3** Problem Solving with Customary Distances

- 6 To make a post for a birdhouse, Ivan joined two pieces of wood – one four feet 10 inches long and another three feet seven inches long. How high is the post?

$$\begin{array}{r} 4 \text{ ft } 10 \text{ in.} \\ + 3 \text{ ft } 7 \text{ in.} \\ \hline 7 \text{ ft } 17 \text{ in.} \\ 7 \text{ ft } (1 \text{ ft } 5 \text{ in.}) \\ 8 \text{ ft } 5 \text{ in.} \end{array}$$

The post is 8 ft 5 in. high.

**Subtopic 4** Problem Solving with Metric Distances

- 7 Samantha ran 800 meters five times. Jennifer ran three kilometers. Who ran farther?

$$\begin{array}{l} 5 \times 800 \text{ m} = 4,000 \text{ m} = 4 \text{ km} \\ 4 \text{ km} > 3 \text{ km} \end{array}$$

Samantha ran farther.