

# Length Lab

Name \_\_\_\_\_

1. What does each unit represent?

(a) mm = \_\_\_\_\_

(b) m = \_\_\_\_\_

(c) cm = \_\_\_\_\_

(d) km = \_\_\_\_\_

2. How much does each one equal?

(a) 1 m = \_\_\_\_\_ cm

(b) 1 cm = \_\_\_\_\_ mm

(c) 1 km = \_\_\_\_\_ m

3. Which measurement is the largest? Circle your answer for each pair.

(a) 14 mm or 1 cm

(d) 145 m or 145 km

(b) 334 m or 1 km

(e) 3.4 cm or 30 mm

(c) 1 m or 990 cm

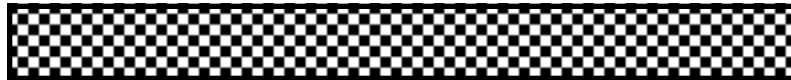
(f) 10 km or 1000 cm

4. Use a metric ruler or meter stick to find each measurement.

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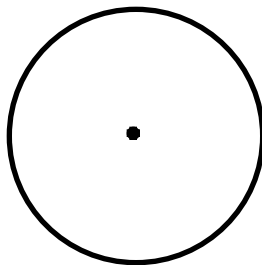
(a) Length of the line in centimeters \_\_\_\_\_

(b) Length of the line to the nearest centimeter \_\_\_\_\_



(c) Height of the rectangle to the nearest millimeter \_\_\_\_\_

(d) Width of the rectangle to the nearest millimeter \_\_\_\_\_

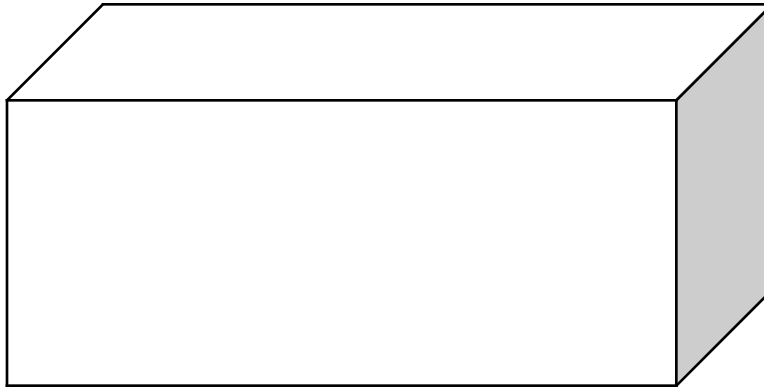


(e) Radius of the circle to the nearest millimeter \_\_\_\_\_

(f) Diameter of the circle in centimeters \_\_\_\_\_

(g) Diameter of the circle to the nearest centimeter \_\_\_\_\_

HINT: If it says “nearest”, you need to round your answer so you don’t have a decimal point. If not, you should have one decimal point in your answer.



(h) Volume of the box in cubic centimeters

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

(Measure to the nearest centimeter before multiplying.)

5. Find the length of an unsharpened pencil (including eraser) in millimeters. \_\_\_\_\_
6. What is your height in centimeters? \_\_\_\_\_ What is your height in meters? \_\_\_\_\_
7. Find the distance between the two index cards in the hallway in meters. \_\_\_\_\_
8. Use your shoe and a metric ruler to complete this section. Keep your shoes on for this one!
  - (a) What is the length of your shoe to the nearest centimeter? \_\_\_\_\_
  - (b) How many shoes would it take (heel to toe) to make 1 meter? \_\_\_\_\_
  - (c) How many shoes would it take to make 1 kilometer? \_\_\_\_\_
9. Use ten pennies and a metric ruler to complete this section.
  - (a) How tall is a stack of ten pennies in centimeters? \_\_\_\_\_
  - (b) How tall would a stack of 100 pennies be in centimeters? \_\_\_\_\_
  - (c) How tall would a stack of 1000 pennies be in centimeters? \_\_\_\_\_
10. Circle the BEST metric unit for each.
  - (a) The length of an eyelash    mm    cm    m    km
  - (b) The height of a flagpole    mm    cm    m    km
  - (c) The length of a strand of spaghetti        mm    cm    m    km
  - (d) The distance from Chicago, IL, to Peoria, IL.                    mm    cm    m    km

Length Lab Answer Key:

1. A - millimeter, B - meter, C - centimeter, D - kilometer
2. A - 100 cm, B - 10 mm, C - 1000 m
3. A - 14 mm, B - 1 km, C - 990 cm, D - 145 km, E - 3.4 cm, F - 10 km
4. A - 14.8 cm, B - 15 cm, C - 10 mm, D - 115 mm, E - 17 mm, F - 3.4 cm, G - 3 cm
5.  $9 \text{ cm} \times 4 \text{ cm} \times 2 \text{ cm} = 72 \text{ cm}^3$
6. Answers will vary depending on pencil used.
7. Answers will vary.
8. Answers will vary.
9. Answers will vary.  
(Answer for B should be 10 times the answer for A. Answer for C should be 100 times the answer for A.)
10. A - mm, B - m, C - cm, D - km

NOTE: Allow  $\pm 1$  mm or  $\pm 0.1$  cm on all measurements. Check measurements on actual page provided for students. There may be slight variances depending on the printer and/or copy machine settings.