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
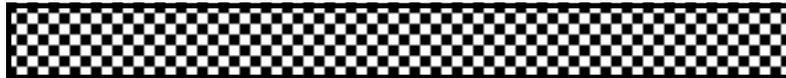
    (c) 1 m or 990 cm   (f) 10 km or 1000 cm

4. Use a metric ruler or meter stick to find each measurement.
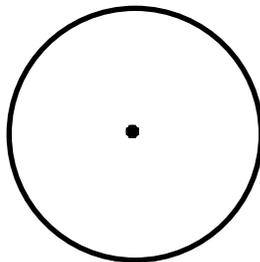
    (a) Length of the line in centimeters _____

    (b) Length of the line to the <u>nearest</u> centimeter _____

    (c) Height of the rectangle to the <u>nearest</u> millimeter _____

    (d) Width of the rectangle to the <u>nearest</u> millimeter _____
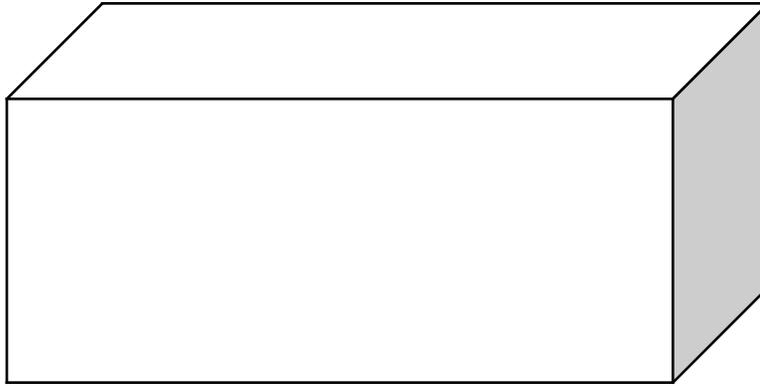
    (e) Radius of the circle to the nearest millimeter _____

    (f) Diameter of the circle in centimeters _____

    (g) Diameter of the circle to the <u>nearest</u> 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.

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(h) Volume of the box in cubic centimeters

_____ x _____ x _____ = _____

(Measure to the <u>nearest</u> 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 centimters? _____

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 cm x 4 cm x 2 cm = 72 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 ±1 mm or ± 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.