

Unit 9

Show What You Know

LESSON

1
2

1. Measure one dimension of each object below to the nearest unit.
Which tool did you use?

Record each measurement using as many units as you can.

- a) a pencil case b) a stapler c) a computer screen d) a table

2

2. Copy each statement. Use =, >, or < to make the statement true.

- a) $1.35 \text{ m} \square 14.3 \text{ dm}$ b) $48 \text{ mm} \square 3.7 \text{ cm}$ c) $75 \text{ cm} \square 7.5 \text{ dm}$
d) $2 \text{ km} \square 1367 \text{ m}$ e) $267 \text{ cm} \square 2.67 \text{ m}$ f) $895 \text{ mm} \square 8.98 \text{ m}$

1
2

3. Draw a line 1.6 dm long.

Write the measurement using as many different units as you can.

2

4. Can you walk 100 000 mm in 2 min? Explain.

3

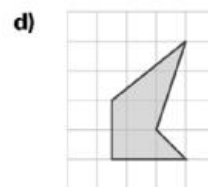
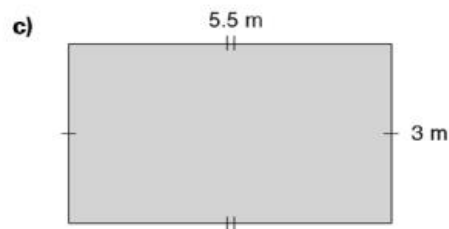
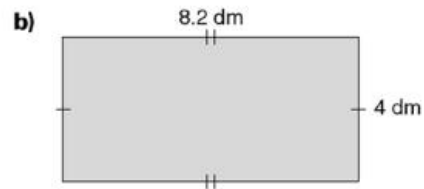
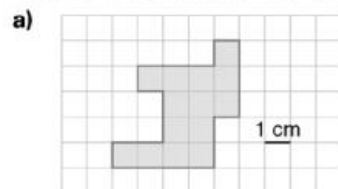
5. Find a cylindrical object such as a soup can.

Which do you think is greater—the height of the can or its circumference?
Measure to check your prediction. What did you find?

4
5
6

6. Find the perimeter of each figure.

Explain how you found each perimeter.
Write each perimeter in a different unit.



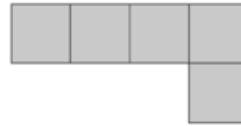
LESSON

7
8
9

7. Find the area of each figure in question 6. Explain how you did this. For which figures is your measure of area an estimate? Explain.

4

8. Use Colour Tiles. Make this pentomino:



- a) Add tiles to the pentomino to make a figure with perimeter 18 units. Draw your figure on grid paper.
 b) What are the fewest tiles you can add to the pentomino to make a figure with perimeter 18 units? Draw your figure.
 c) What are the most tiles you can add to the pentomino to make a figure with perimeter 18 units? Draw your figure.
 d) Find the area of each figure you drew in parts a, b, and c.

1
5
7

9. Choose the most appropriate unit to measure:

- a) the length of the school parking lot
 b) the perimeter of a province
 c) the circumference of a birthday cake
 d) the width of a honeybee's leg
 e) the area of Lake Superior

7

10. Darlene built a rectangular dog pen with area 24.5 m^2 . The length of the pen is 5 m. What is the width of the pen?

11. The building is one storey and rectangular.



What might the dimensions of the floor be? Give 3 different answers.

UNIT

9

Learning Goals

- measure linear dimensions
- relate units of linear measure
- use decimals to report linear measures
- explore circumference
- estimate and measure perimeter and area
- develop and use rules for calculating perimeter and area of a rectangle
- solve problems related to length, perimeter, and area