Year 4 · Measurement: Measuring All Around Us

Name: _____ Date: _____

Hi there! This sheet gives you practice measuring length, area, angles, temperature and time. Remember to always write the unit (like cm or °C) next to your number!

Warm-up

1. How many minutes are there in 1 hour?

2. A square has sides of 5 cm. What is the area? (area = side × side)

3. A quarter turn is how many degrees?

4. Write this length using both units: 1 metre and 40 centimetres. How many centimetres is that altogether?

Practice

5. A rectangle garden bed is 6 m long and 3 m wide. What is its area?

6. Find the perimeter of a triangle with sides 8 cm, 5 cm and 7 cm.

7. The thermometer outside the classroom in Avondale reads 14°C in the morning and 21°C at lunchtime. How much warmer is it at lunchtime?

8. Word problem: Mere walks to school. She leaves home at 8:15 and arrives at 8:47. How long did her walk take?

9. Word problem: Tama fills a rectangular box with identical cubes. The bottom layer holds 4 rows of 3 cubes, and he stacks 2 layers. How many cubes fit in the box (this is the volume in cubes)?

10. An angle opens a little less than a straight line. Is it closest to 90°, 180° or 360°? Explain.

Challenge

11. An irregular shape drawn on a grid covers 7 full squares and 4 half squares. What is its total area in squares?

12. A netball game is played in 4 quarters. Each quarter lasts 15 minutes. What is the total playing time in minutes, and how many hours and minutes is that?

Answer key (for parents and tutors)

1. How many minutes are there in 1 hour?
   There are 60 minutes in 1 hour.
2. A square has sides of 5 cm. What is the area? (area = side × side)
   Area = 5 cm × 5 cm = 25 square centimetres (25 cm²).
3. A quarter turn is how many degrees?
   A quarter turn is 90 degrees (90°).
4. Write this length using both units: 1 metre and 40 centimetres. How many centimetres is that altogether?
   1 m and 40 cm. Since 1 m = 100 cm, that is 100 cm + 40 cm = 140 cm altogether.
5. A rectangle garden bed is 6 m long and 3 m wide. What is its area?
   Area = length × width = 6 m × 3 m = 18 square metres (18 m²).
6. Find the perimeter of a triangle with sides 8 cm, 5 cm and 7 cm.
   Perimeter is the distance all the way around: 8 cm + 5 cm + 7 cm = 20 cm.
7. The thermometer outside the classroom in Avondale reads 14°C in the morning and 21°C at lunchtime. How much warmer is it at lunchtime?
   21°C − 14°C = 7°C. It is 7°C warmer at lunchtime.
8. Word problem: Mere walks to school. She leaves home at 8:15 and arrives at 8:47. How long did her walk take?
   From 8:15 to 8:47 is 47 − 15 = 32 minutes. Her walk took 32 minutes.
9. Word problem: Tama fills a rectangular box with identical cubes. The bottom layer holds 4 rows of 3 cubes, and he stacks 2 layers. How many cubes fit in the box (this is the volume in cubes)?
   One layer = 4 × 3 = 12 cubes. With 2 layers: 12 × 2 = 24 cubes. The volume is 24 cubes.
10. An angle opens a little less than a straight line. Is it closest to 90°, 180° or 360°? Explain.
    A straight line is 180°, so an angle a little less than straight is closest to 180°. (A full turn is 360° and a right angle is 90°.)
11. An irregular shape drawn on a grid covers 7 full squares and 4 half squares. What is its total area in squares?
    Full squares = 7. Half squares: 4 halves = 4 × ½ = 2 whole squares. Total area = 7 + 2 = 9 squares.
12. A netball game is played in 4 quarters. Each quarter lasts 15 minutes. What is the total playing time in minutes, and how many hours and minutes is that?
    Total = 4 × 15 = 60 minutes. Since 60 minutes = 1 hour, that is 1 hour and 0 minutes (1 hour of play).