Year 7 · Measurement: Perimeter, Area, Volume & Time

Name: _____ Date: _____

Hi! This sheet gives you practice with perimeter, area and volume formulae, and reading timetables. Show your working and remember your units, squared for area, cubed for volume!

Warm-up

1. Find the perimeter of a square with side length 7 cm.

2. Find the area of a rectangle that is 9 m long and 4 m wide.

3. Find the volume of a cube with side length 3 cm.

4. Which unit best measures the mass of an apple: milligram, gram, or kilogram? Explain.

Practice

5. A rectangle has a perimeter of 30 cm. Its length is 9 cm. Find its width.

6. A triangle has an area of 24 cm² and a height of 6 cm. Find the length of its base.

7. Find the volume of a rectangular prism that is 5 cm long, 4 cm wide and 3 cm high.

8. Aroha is building a rectangular vegetable garden in Avondale that is 6 m long and 2.5 m wide. She wants to put a low fence all the way around. How many metres of fencing does she need?

9. A cardboard box is a cube with a volume of 64 cm³. What is the length of one edge?

10. Tomo makes a garden path shaped like a rectangle with a triangle on one end. The rectangle is 8 m long and 3 m wide. The triangle on the end has a base of 3 m and a height of 2 m. What is the total area of the path?

Challenge

11. An L-shaped patio is made by joining two rectangles. The whole shape fits inside a 10 m by 6 m rectangle, but a 4 m by 3 m corner rectangle has been removed. Find the area and the perimeter of the L-shaped patio.

12. The 07:45 bus from New Lynn takes 35 minutes to reach Britomart. A student needs to be at Britomart by 08:30 for a study session. Does the bus arrive in time, and how many minutes to spare (or short) are there? If the student misses it and catches the next bus at 08:10 (same 35-minute trip), what time will they arrive?