Test - Converting units, area, perimeter and volume

Year: Year 6 · Duration: 40 minutes · /20

Name:	Date:	**Mark: /20**

Question	1	2	3	4	5	Total
marks	3	4	4	4	5	**20**
Mark						

Show your working.

Question 1 (3 marks)

Question 1 – Converting units

a. Change 4.2 km to metres.
b. Change 3 500 ml to litres.
c. About how many kilometres is 20 miles? (5 miles is about 8 km)

Question 2 (4 marks)

Question 2 – Perimeter and area

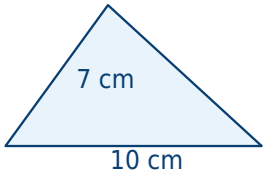
A rectangular garden is 14 m long and 9 m wide.

a. Work out the perimeter of the garden.
b. Work out the area of the garden.
c. A square patio of side 4 m is built in the garden. What area of the garden is left?
d. Turf costs £3.50 for each square metre. How much does it cost to turf the area that is left?

Question 3 (4 marks)

Question 3 – Triangles and parallelograms

Use the perpendicular heights given in each question.



a. Find the area of the triangle with a base of 10 cm and a height of 7 cm.
b. A parallelogram has a base of 12 cm and a height of 5 cm. Find its area.

c. A triangle has the same area as the parallelogram in part (b). Its base is 15 cm. Find its height.

Question 4 (4 marks)

Question 4 – Volume

a. Work out the volume of a cuboid that is 8 cm long, 5 cm wide and 4 cm high.
b. A cube has a volume of 125 cm^3. What is the length of one edge?
c. A tank is 40 cm long, 25 cm wide and 20 cm high. How many litres of water does it hold when it is full? (1 litre = 1 000 cm^3)
d. The tank is filled to a depth of 16 cm. How many litres of water are in it?

Question 5 (5 marks)

Question 5 – The swimming club

A swimming club has a rectangular pool that is 20 m long, 8 m wide and 1.5 m deep. A cubic metre holds 1 000 litres.

a. Work out the volume of the pool in cubic metres.
b. How many litres of water does it hold when full?
c. A pump fills the pool at 2 000 litres per minute. How long does it take to fill? Give the answer in hours and minutes.
d. The sides and the bottom of the pool are to be painted. Work out the area to be painted. (The pool is open at the top.)