FOUNDATION & HIGHER

SAME AT BOTH TIERS

Name ..... Class .....

G14: Measures in context

Solve problems using units of length, area, volume, time and money

20 marks · 25 minutes · Non-calculator

1) A fish tank is 80 cm by 40 cm by 35 cm. It is filled to 5 cm below the top. How many litres of water does it hold?

..... litres

[Question 1: 3 marks]

2) A room is 4 m by 3 m with walls 2.5 m high. It has a 2 m^2 door and a 1.5 m^2 window. One litre of paint covers 10 m^2 and paint comes in 2.5-litre tins. How many tins are needed for one coat on the walls?

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[Question 2: 4 marks]

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3) A train travels for 1 hour 45 minutes at an average of 96 km/h. How far does it travel?

..... km

[Question 3: 2 marks]

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4) A 15 m by 8 m garden is covered with turf rolls measuring 1 m by 0.5 m. Each roll costs £3.20. Find the total cost.

£ .....

[Question 4: 3 marks]

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5) A bottle holds 0.15 litres of medicine. Each dose is 5 ml and 3 doses are taken a day. How many days does the bottle last?

..... days

[Question 5: 3 marks]

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6) A concrete slab is 3 m by 2 m by 15 cm. Each bag makes 0.05 m^3 of concrete. How many bags are needed?

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[Question 6: 3 marks]

7) A flight leaves London at 22:30 and lasts 7 hours 20 minutes. The destination's local time is 5 hours ahead of London. What is the local time on arrival?

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[Question 7: 2 marks]

End of paper – 20 marks in total

Answers and brief mark scheme

Q	Answer	Method / notes
1	96	Water depth 30 cm (P1); 96 000 cm^3 (P1); A1.
2	2	Walls 35 m^2 (P1); subtract 3.5 (P1); 3.15 litres (P1); 2 tins (A1).
3	168	1.75 hours (P1); A1.
4	£768	Area 120 m^2 (P1); 240 rolls (P1); A1.
5	10	150 ml (P1); 30 doses (P1); A1.
6	18	0.9 m^3 (P1, P1); A1.
7	10:50 next day	05:50 London time (P1); A1.