FOUNDATION & HIGHER

SAME AT BOTH TIERS

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

N13: Units and measures

Standard units and compound measures

20 marks · 25 minutes · Non-calculator

1) Convert

(a) 3.5 km to metres

..... m

(1)

(b) 450 g to kilograms

..... kg

(1)

(c) 2.4 hours to hours and minutes

.....

(1)

(d) 750 ml to litres

..... litres

(1)

[Question 1: 4 marks]

2) Convert 3 m^2 to cm^2

..... cm^2

[Question 2: 2 marks]

3) Convert 2.5 m^3 to cm^3

..... cm^3

[Question 3: 1 marks]

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4) A car travels 150 km in 2.5 hours. Find its average speed.

..... km/h

[Question 4: 1 marks]

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5) A block has a mass of 240 g and a volume of 30 cm^3. Find its density.

..... g/cm^3

[Question 5: 1 marks]

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6) A metal has a density of 7.8 g/cm^3. Find the mass of 50 cm^3 of the metal.

..... g

[Question 6: 2 marks]

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7) A box presses down with a force of 600 newtons over an area of 1.5 m^2. Find the pressure. (Pressure = force ÷ area)

..... N/m^2

[Question 7: 2 marks]

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8) Change 18 km/h into m/s.

..... m/s

[Question 8: 2 marks]

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9) How long does it take to travel 84 km at 56 km/h? Give your answer in hours and minutes.

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[Question 9: 2 marks]

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10) A train leaves at 10:47 and arrives at 13:15. How long is the journey?

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[Question 10: 1 marks]

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11) The exchange rate is £1 = $1.25. Change $40 into pounds.

£ .....

[Question 11: 2 marks]

End of paper – 20 marks in total

Answers and brief mark scheme

Q	Answer	Method / notes
1	(a) 3500 (b) 0.45 (c) 2 h 24 min (d) 0.75	B1 each.
2	30 000	100^2 = 10 000 (M1); A1.
3	2 500 000	B1.
4	60	B1.
5	8	B1.
6	390	7.8 × 50 (M1); A1.
7	400	600 ÷ 1.5 (M1); A1.
8	5	18 000 m in 3600 s (M1); A1.
9	1 h 30 min	84 ÷ 56 = 1.5 (M1); A1.
10	2 h 28 min	B1.
11	£32	40 ÷ 1.25 (M1); A1.