



3.10F Conversions and Units: Foundation Tier Practice

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 50 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** Work out 2500 g in kilograms.

(Total for Question 1 is 1 mark)

- 2** Write 7.2 m as a number of centimetres.

(Total for Question 2 is 1 mark)

- 3** Work out 3 hours 45 minutes in minutes.

(Total for Question 3 is 2 marks)

- 4** Convert 4.5 km into metres.

(Total for Question 4 is 2 marks)

- 5** Write 1200 ml as a number of litres.

(Total for Question 5 is 2 marks)

6 Convert 6500 mm into metres. Give the answer with the correct unit.

(Total for Question 6 is 3 marks)

7 A cake recipe uses 0.75 kg of flour and 350 g of sugar. Work out the total mass of flour and sugar in kilograms.

(Total for Question 7 is 3 marks)

8 A car travels 90 km in 1.5 hours. Work out its average speed in kilometres per hour. Give the unit.

(Total for Question 8 is 3 marks)

9 Convert 5 metres into centimetres and into millimetres. Give both answers with units.

(a) Write 5 m in centimetres. (2)

(b) Write 5 m in millimetres. (2)

(Total for Question 9 is 4 marks)

10 Write 2.4 litres as a number of millilitres.

(Total for Question 10 is 3 marks)

11 Convert 3.5 tonnes to kilograms and to grams. Give both answers with units.

(a) Write 3.5 tonnes in kilograms. (2)

(b) Write 3.5 tonnes in grams. (2)

(Total for Question 11 is 4 marks)

12 A 1.5 litre bottle of juice is shared into glasses of 250 ml. Work out how many full glasses can be filled.

(Total for Question 12 is 2 marks)

13 On a map 1 cm represents 4 km. A route measures 7.5 cm on the map. Work out the actual distance in kilometres.

(Total for Question 13 is 3 marks)

- 14** A painter uses 2.5 litres of paint to cover 12 square metres. Work out how many litres of paint are needed for 1 square metre. Give your answer to 2 decimal places.

(Total for Question 14 is 3 marks)

- 15** a) Write 3 hours 20 minutes as a number of hours to 3 decimal places.
b) A car travels 200 km in that time. Work out the average speed in km/h. Give the unit.

(a) Write 3 hours 20 minutes as a number of hours to 3 decimal places. (2)

(b) A car travels 200 km in that time. Work out the average speed in km/h. Give the unit. (2)

(Total for Question 15 is 4 marks)

Mark scheme · 3.10F Conversions and Units: Foundation Tier Practice

Question 1

- **B1** 2.5 kg cao
- **Answer:** 2.5 kg

Question 2

- **B1** 720 cm cao
- **Answer:** 720 cm

Question 3

- **M1** correct method, converting 3 hours to 180 minutes or 45 minutes to 0.75 hours
- **A1** 225 minutes cao
- **Answer:** 225 minutes

Question 4

- **M1** method shown, 4.5×1000 or move decimal
- **A1** 4500 m cao
- **Answer:** 4500 m

Question 5

- **M1** method shown, divide 1200 by 1000 or move decimal
- **A1** 1.2 L cao
- **Answer:** 1.2 L

Question 6

- **M1** method, divide 6500 by 1000 or move decimal
- **A1** 6.5 cao
- **B1** units m included: 6.5 m
- **Answer:** 6.5 m

Question 7

- **M1** correct conversion of 0.75 kg to 750 g or 350 g to 0.35 kg
- **M1** correct addition of masses ($750 + 350 = 1100$ g or $0.75 + 0.35 = 1.1$ kg)
- **A1** 1.1 kg cao
- **Answer:** 1.1 kg

Question 8

- **M1** division method, $90 \div 1.5$
- **A1** 60 cao
- **B1** unit given: 60 km/h
- **Answer:** 60 km/h

Question 9

- (a) **M1** method, 5×100
- (a) **A1** 500 cm cao
- (a) **Answer:** 500 cm
- (b) **M1** method, 5×1000
- (b) **A1** 5000 mm cao
- (b) **Answer:** 5000 mm

Question 10

- **M1** method, 2.4×1000 or move decimal
- **A1** 2400 cao
- **B1** include unit ml: 2400 ml
- **Answer: 2400 ml**

Question 11

- (a) **M1** method, 3.5×1000
- (a) **A1** 3500 kg cao
- (a) **Answer: 3500 kg**
- (b) **M1** method, $3.5 \times 1\,000\,000$ or 3500×1000
- (b) **A1** 3500000 g cao
- (b) **Answer: 3500000 g**

Question 12

- **M1** convert 1.5 L to 1500 ml and divide by 250 or method showing $1500 \div 250$
- **A1** 6 cao
- **Answer: 6**

Question 13

- **M1** method, 7.5×4
- **A1** 30 cao
- **B1** unit km included: 30 km
- **Answer: 30 km**

Question 14

- **M1** method, $2.5 \div 12$
- **M1** correct calculation 0.208333... shown
- **A1** 0.21 L/m^2 awrt
- **Answer: 0.21 L/m^2**

Question 15

- (a) **M1** method, 20 minutes = $20/60$ hours
- (a) **A1** 3.333 hours cao to 3 dp
- (a) **Answer: 3.333 hours**
- (b) **M1** method, $200 \div 3.333$
- (b) **A1** 60 km/h cao
- (b) **Answer: 60 km/h**