



KS2.M-Y5M1 Measurement: Metric and Imperial Units

Calculators not allowed · about 50 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** Write the larger metric unit for each pair.
(a) Which is larger: centimetre or metre? (1)

- 2** Convert the measurement.
(a) Convert 3.5 metres to centimetres. (1)

(b) Convert 720 centimetres to metres. (1)

- 3** Fill in the missing unit to make each statement correct.
(a) 1,000 metres = 1 _____. (1)

(b) 1,000 grams = 1 _____. (1)

- 4** Sophie runs 4.8 kilometres. How many metres did she run? (2)

- 5** A recipe needs 250 grams of flour. Kwame has a 1 kilogram bag. How many recipes can he make using the whole bag?

(2)

-
- 6** Convert these measurements of capacity.

(a) 750 millilitres to litres.

(1)

(b) 2.4 litres to millilitres.

(1)

-
- 7** A container holds 3.6 litres of paint. Sam uses 450 millilitres on one wall. How many full walls can he paint with the container?

(2)

-
- 8** Which is heavier: 2.5 kilograms or 2,500 grams? Explain your answer in one sentence.

(2)

-
- 9** Convert 5 kilometres into metres.

(1)

-
- 10** A ribbon is 125 centimetres long. How many metres and centimetres is this?

(2)

- 11** A school swimming pool is filled with 12,000 litres of water each week. How many kilolitres is this?

(2)

- 12** Priya says that 1 inch is exactly 2.5 centimetres. Is she correct? Explain your answer using an approximate imperial to metric conversion.

(2)

- 13** A brass lamp weighs 2.75 kilograms. Write this weight in grams.

(1)

- 14** Choose the best estimate in metres of the length of a school classroom: 3 m, 7 m, or 30 m? Explain your choice in one sentence.

- ☐ 3 m
☐ 7 m
☐ 30 m

- 15** A parcel is 40 cm by 30 cm by 20 cm. Find its volume in cubic centimetres.

(2)

- 16** Oliver cycles 12.5 kilometres to football practice and back the same way. What distance does he travel in metres?

(1)

17 A child measures the length of a pencil as 18 cm. Convert this length to millimetres.

(2)

18 Explain why 1 mile is often given as about 1.6 kilometres. Your explanation should show the conversion and say whether it is exact or an approximation.

(3)

Mark scheme · KS2.M-Y5M1 Measurement: Metric and Imperial Units

Question 1

- (a) **B1** metre cao
- (a) Answer: **metre**

Question 2

- (a) **B1** 350 cm cao
- (a) Answer: **350**
- (b) **B1** 7.2 m cao
- (b) Answer: **7.2**

Question 3

- (a) **B1** kilometre cao
- (a) Answer: **kilometre**
- (b) **B1** kilogram cao
- (b) Answer: **kilogram**

Question 4

- **M1** $4.8 \times 1000 = 4800$ or method seen
- **B1** 4,800 m cao
- Answer: **4,800**

Question 5

- **M1** $1000/250 = 4$ method seen
- **B1** 4 cao
- Answer: **4**

Question 6

- (a) **B1** 0.75 L cao
- (a) Answer: **0.75**
- (b) **B1** 2400 ml cao
- (b) Answer: **2400**

Question 7

- **M1** Convert to same units and divide: $3600/450 = 8$ seen
- **B1** 8 cao
- Answer: **8**

Question 8

- **M1** Shows conversion or equality, e.g. $2.5 \text{ kg} = 2500 \text{ g}$ seen
- **B1** Statement that they are equal or same weight cao
- Answer: **They are the same weight; $2.5 \text{ kg} = 2500 \text{ g}$.**

Question 9

- **B1** 5000 m cao
- Answer: **5000**

Question 10

- **M1** Shows dividing by 100 to get metres and remainder in cm
- **B1** 1 m 25 cm cao
- Answer: **1 m 25 cm**

Question 11

- **M1** $12,000 / 1000 = 12$ shown
- **B1** 12 kL cao
- Answer: **12**

Question 12

- **M1** Gives an approximate value showing 1 in is about 2.54 cm or states not exact
- **B1** Concludes that 2.5 cm is a close approximation but not exact cao
- Answer: **Not exactly. 1 in is about 2.54 cm, so 2.5 cm is a close approximation but not exact.**

Question 13

- **B1** 2750 g cao
- Answer: **2750**

Question 14

- **M1** Gives a reason showing realistic room size, e.g. desks fit and measurements compared
- **B1** 7 m chosen with a sensible explanation cao
- Answer: **7 m**

Question 15

- **M1** Uses multiplication $40 \times 30 \times 20$ seen
- **B1** $24,000 \text{ cm}^3$ cao
- Answer: **24000**

Question 16

- **B1** 25000 m cao
- Answer: **25000**

Question 17

- **M1** $18 \times 10 = 180$ seen
- **B1** 180 mm cao
- Answer: **180**

Question 18

- **M1** States the exact conversion or a known conversion factor, e.g. 1 mile = 1609 m or 1.609 km
- **M1** Explains that 1.6 km is a rounded value from 1.609 km (shows subtraction or rounding idea)
- **B1** Concludes that 1.6 km is an approximation, not exact cao
- Answer: **1 mile = 1,609 m which is 1.609 km, so 1.6 km is a rounded approximation; it is not exact.**