FUNCTIONAL SKILLS MATHEMATICS

AQA | Edexcel | City & Guilds | Open Awards | NCFE | Highfield

Level 2

Unit Conversions

Materials
- You **cannot** use a calculator for **questions** with this symbol.

Instructions
- Answer **all** questions.
- Answer questions on separate paper.

Information and Advice
- The marks for each question are shown in brackets – use this as a guide on how long to spend on each question.
- Read each question carefully before you answer it.
- Check you answers.

Q1   Convert these measurements in centimetres (cm) into metres (m).

1(a)   25 cm

[1 mark]

1(b)   38 cm

[1 mark]

1(c)   62 cm

[1 mark]

1(d)   44 cm

[1 mark]

1(e)   197 cm

[1 mark]

Q2   Convert these measurements in metres (m) into centimetres (cm).

2(a)   50 m

[1 mark]

2(b)   7.2 m

[1 mark]

2(c)   1.98 m

[1 mark]

2(d)   455 m

[1 mark]

9

Q3   Convert these measurements in metres (m) into kilometres (km).

3(a)   1126 m

[1 mark]

3(b)   3257 m

[1 mark]

3(c)   2164 m

[1 mark]

3(d)   9333 m

[1 mark]

3(e)   933 m

[1 mark]

Q4   Convert these measurements in kilometres (km) into metres (m).

4(a)   0.294 km

[1 mark]

4(b)   15 km

[1 mark]

4(c)   0.013 km

[1 mark]

4(d)   3550 km

[1 mark]

9

Q5 Convert these distances in centimetres (cm) into millimetres (mm).

5(a) 1 cm

[1 mark]

5(b) 5.8 cm

[1 mark]

5(c) 240 cm

[1 mark]

5(d) 48.1 cm

[1 mark]

5(e) 123.3 cm

[1 mark]

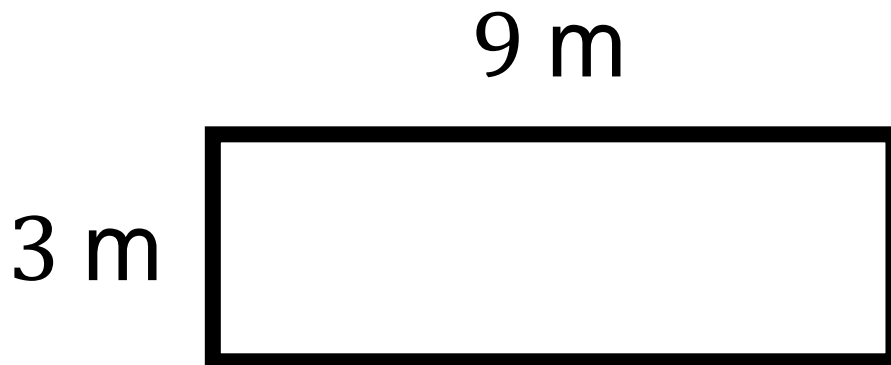**Q6** Convert these distances in millimetres (mm) into centimetres (cm).

6(a) 62 mm

[1 mark]

6(b) 190 mm

[1 mark]

6(c) 993 mm

[1 mark]

6(d) 10000 mm

[1 mark]

9

Q7   James has a patio in his back garden.

<div align="center">

9 m

3 m

</div>

7(a)   Find the area of the patio in square metres.

[1 mark]

7(b)   By converting the length of each side into centimetres, find the area of the patio in square centimetres.

[2 marks]

7(c)   Hence, find the number of paving slabs needed to cover the patio, if each paving slab has an area of 3600 cm^2.

[2 marks]

Q8   Convert these weights in grams (g) into kilograms (kg).

8(a)   2000 g

[1 mark]

8(b)   38 g

[1 mark]

8(c)   300 g

[1 mark]

8(d)   616 g

[1 mark]

8(e)   21119 g

[1 mark]

Q9   Convert these weights in kilograms (kg) into grams (g).

9(a)   4 kg

[1 mark]

9(b)   0.9 kg

[1 mark]

9(c)   208 kg

[1 mark]

9(d)   31.256 kg

[1 mark]

Turn over ▶

Q10   Four university students are weighed as part of an eligibility test for a medical experiment:
Alice – 74.1 kg
Ben – 82.4 kg
Caroline – 76.2 kg
Des – 95.3 kg

10(a)   What is the weight difference, in grams, between Des and Caroline?

[2 marks]

10(b)   If Ben eats a 500 g burger after being weighed, what is his new weight in kilograms?

[2 marks]

10(c)   To be eligible for the study, you must weigh within 2500 g of 75 kg. Which students are eligible to participate?

[3 marks]

7

Turn over ►

Q11   Convert these measurements of capacity from millilitres (ml) to litres (L).

11(a)   3000 ml

[1 mark]

11(b)   124 ml

[1 mark]

11(c)   4200 ml

[1 mark]

11(d)   19 ml

[1 mark]

11(e)   19526 ml

[1 mark]

Q12   Convert these measures of capacity from litres (L) to millilitres (ml)

12(a)   0.5 L

[1 mark]

12(b)   49 L

[1 mark]

12(c)   0.814 L

[1 mark]

12(d)   16.52 L

[1 mark]

Turn over ▶

Q13   Convert the following amounts of pounds (£) into pence (p).

13(a)   £2.00

[1 mark]

13(b)   £1.29

[1 mark]

13(c)   £0.24

[1 mark]

13(d)   £31.68

[1 mark]

13(e)   £1129.99

[1 mark]

Q14   Convert the following amounts of pence (p) into pounds (£).

14(a)   108 p

[1 mark]

14(b)   4000 p

[1 mark]

14(c)   29 p

[1 mark]

14(d)   1138 p

[1 mark]

Turn over ►

Q15 In a supermarket, Tammy notices that the prices of fruit and vegetables are all given in pence.

15(a) A punnet of cherries is 155 p. What is this in pounds?

[1 mark]

15(b) A cucumber is 68 p. How much, in pounds, do two cucumbers cost?

[2 marks]

15(c) Red onions are 23 p per 100 g. Tammy buys 500 g. How much, in pounds, does this cost?

[2 marks]

15(d) Avocados are 560 p per kilogram. Tammy notices a 1 kg joint of beef priced at £6.90 on the opposite aisle. Which is more expensive per kilogram?

[2 marks]

Q16   Convert these weights in kilograms (kg) into pounds (lb).
1 kg = 2.2 lb

16(a)   1 kg

16(b)   6 kg

16(c)   2 kg

16(d)   10 kg

16(e)   35 kg

Q17   Convert these distances in feet (ft) into centimetres (cm).
1 ft = 30 cm

17(a)   1 ft

17(b)   8 ft

17(c)   21 ft

17(d)   3.5 ft

Q18   Convert these capacities in gallons into litres (L).
1 gallon = 4.5 L

18(a)   1 gallon

<div align="right">[1 mark]</div>

18(b)   5 gallons

<div align="right">[1 mark]</div>

18(c)   9 gallons

<div align="right">[1 mark]</div>

18(d)   30 gallons

<div align="right">[1 mark]</div>

18(e)   19 gallons

<div align="right">[1 mark]</div>

Q19   Convert these distances in miles (mi) into kilometres (km)
1 mi = 1.6 km

19(a)   5 mi

<div align="right">[1 mark]</div>

19(b)   28 mi

<div align="right">[1 mark]</div>

19(c)   44 mi

<div align="right">[1 mark]</div>

19(d)   3.6 mi

<div align="right">[1 mark]</div>

Turn over ▶

Q20   For this question, you will find these conversions helpful.
1 oz = 28 g
1 mi = 1.6 km
1 in = 2.5 cm
1 pt = 568 ml

James is baking, but his scales give readings in grams (g) while his recipe is in ounces (oz). His recipe says he needs these ingredients:
5 oz flour
3 oz sugar
4 oz butter
$\frac{1}{2}$ pt milk
2 eggs

20(a)   Convert the amounts of flour, sugar and butter to grams (g).

[3 marks]

20(b)   James has a measuring jug that is in millilitres (ml) only. How much milk does he need in millilitres (ml)?

[1 mark]

20(c)   James realises he does not have enough milk, so he drives to the supermarket to buy more. The supermarket is 0.9 miles (mi) away – how far is this in kilometres (km)?

[1 mark]

20(d)   Later, the recipe calls for the dough to be rolled to a thickness of $\frac{1}{4}$ inch (in). What is this in centimetres (cm)?

[1 mark]