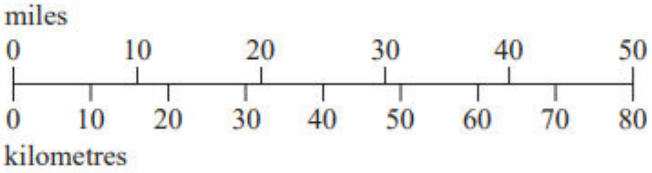
CONVERSIONS AND UNITS

Pearson Edexcel - Thursday 4 June 2020 - Paper 2 (Calculator) Foundation Tier

1.

9 This scale can be used to change between kilometres and miles.



(a) Use the scale to change 40 kilometres to miles.

..... miles

(1)

Here is an approximate rule to change from kilometres to miles.

Divide the distance in kilometres by 10 and then multiply by 6

(b) Use this approximate rule to change 40 kilometres to miles.

..... miles

(2)

(c) Compare your answer to part (b) with your answer to part (a).

.....

.....

.....

(1)

(Total for Question 9 is 4 marks)

Pearson Edexcel - Monday 8 June 2020 - Paper 3 (Calculator) Foundation Tier

2.

1 Change 300 centimetres into metres.

..... metres

(Total for Question 1 is 1 mark)

Pearson Edexcel - Thursday 6 June 2019 - Paper 2 (Calculator) Foundation Tier

3.

4 Change 1756 grams to kilograms.

.....kg

(Total for Question 4 is 1 mark)

Pearson Edexcel - Tuesday 11 June 2019 - Paper 3 (Calculator) Foundation Tier

4.

3 Change 1.5 kilometres to metres.

..... metres

(Total for Question 3 is 1 mark)

Pearson Edexcel - Thursday 8 November 2018 - Paper 2 (Calculator) Foundation Tier

5.

3 (a) Change 4560 g into kg.

..... kg
(1)

(b) Change 7.3 m into mm.

..... mm
(1)

(Total for Question 3 is 2 marks)

Pearson Edexcel - Thursday 7 June 2018 - Paper 2 (Calculator) Foundation Tier

6.

5 (a) Change 35 cm to mm.

..... mm
(1)

(b) Change 7700 millilitres to litres.

..... litres
(1)

(c) Change 0.32 kilograms to grams.

..... grams
(1)

(Total for Question 5 is 3 marks)

7.

8 A map has a scale of 1 cm to 14 km.

On the map, the distance between Manchester and London is 18.8 cm.

What is the real distance, in km, between Manchester and London?

..... km

(Total for Question 8 is 2 marks)

Pearson Edexcel - Thursday 2 November 2017 - Paper 1 (Non-Calculator) Foundation Tier

8.

1 (a) Change 365 cm into metres.

..... m

(1)

(b) Change 2.7 kg into grams.

..... g

(1)

(Total for Question 1 is 2 marks)

Pearson Edexcel – Specimen 2 - Paper 2 (Calculator) Foundation Tier

9.

20 Water flows through a pipe at a rate of 20 gallons per minute.

1 gallon = 4.55 litres.

Change 20 gallons per minute to litres per second.
Give your answer correct to 3 significant figures.

..... litres per second

(Total for Question 20 is 2 marks)

Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

10.

1 Change 4500 g to kg.

..... kg

(Total for Question 1 is 1 mark)

Pearson Edexcel – Specimen 1 - Paper 1 (Non-Calculator) Foundation Tier

11.

1 Change 530 centimetres into metres.

..... metres

(Total for Question 1 is 1 mark)

12.

10 An American airline has a maximum size for bags on its planes.
The diagram shows the maximum dimensions.

Chris has a bag.

It has
height 50 cm
width 40 cm
depth 20 cm

1 inch = 2.54 cm

Can Chris take this bag on the plane?
You must show your working.

(Total for Question 10 is 3 marks)

Pearson Edexcel – Specimen 1 - Paper 3 (Calculator) Foundation Tier

13.

5 There are 1.5 litres of water in a bottle.

There are 250 millilitres of water in another bottle.

Work out the total amount of water in the two bottles.

.....

(Total for Question 5 is 3 marks)

OCR Thursday 05 November 2020- Morning (Non-Calculator) Foundation Tier

14.

2 **(a)** **(i)** Write 350 centimetres in metres.

(a)(i) ..... m **[1]**

(ii) Write 1.52 litres in millilitres.

(ii) ..... ml **[1]**

(b) Work out.

5.7 cm + 30 mm.

Give your answer in centimetres.

(b) ..... cm **[2]**

OCR Monday 11 November 2019 – Afternoon (Calculator) Foundation Tier

15.

2 Work out.

$1.52\,\text{kg} + 80\,\text{g}$

Give your answer in kilograms.

..... kg **[2]**

OCR Thursday 6 June 2019 – Morning (Non-Calculator) Foundation Tier

16.

12 Kate is 5 feet 2 inches tall.
Alice is 1.57 metres tall.
Alice says that she is taller than Kate.

Use the conversions below to decide if Alice is correct.

12 inches = 1 foot 1 inch = 2.5 centimetres

..... **[4]**

OCR Tuesday 11 June 2019 – Morning (Calculator) Foundation Tier

17.

18 Tom researches the weights of plant seeds.

- One poppy seed weighs 3×10^{-4} grams.
- 250 pumpkin seeds weigh 21 grams.
- One sesame seed weighs 3.64×10^{-6} kilograms.

Write the three types of seed in order according to the weight of one seed.
Write the lightest type of seed first.
You must show how you decide.

..... , ... , ...**[4]**

lightest

OCR Monday 6 November 2017– Morning (Calculator) Foundation Tier

18.

11 **(a)** Georgia is 4 feet 2 inches tall.
There are 12 inches in a foot.

Use the conversion, 1 inch = 2.5 centimetres, to convert Georgia's height into metres.

(a) ..... m **[3]**

(b) Owen weighs 6 stones 4 pounds.
There are 14 pounds in a stone.

Use the conversion, 2.2 pounds = 1 kilogram, to convert Owen's weight into kilograms.

(b) ..... kg **[3]**

19.

8 1 yard is 36 inches.
10 cm is an approximation for 4 inches.

Work out an approximation for the number of cm in 2 yards.

.....

(Total for Question 8 is 3 marks)

20.

16 Change 72 km/h into m/s.

..... m / s

(Total for Question 16 is 3 marks)

OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

21.

6 **(a)** Lucy and Ben share £42.
Lucy's share is £30.

Write the ratio Lucy's share : Ben's share in its simplest form.

(a) ..... : ..... **[2]**

(b) The ratio 2.5 metres to 70 centimetres can be written in the form $1 : n$.

Find the value of n.

(b) n = ... **[2]**

(c) Water flows at a steady rate from a tap.
It takes 50 seconds to fill a 5 litre watering can from this tap.

The rate at which water flows from the tap is halved.

(i) Complete.

5 litres = ... cm^3 **[1]**

(ii) Find the rate at which the water is **now** flowing from the tap.
Give your answer in cubic centimetres per second (cm^3/s).

(ii) ..... cm^3/s **[2]**

AQA Tuesday 19 May 2020 – Morning (Non-Calculator) Foundation Tier

22.

4 What is 680 millimetres in centimetres?

Circle your answer.

[1 mark]

0.68 cm 6.8 cm 68 cm 6800 cm

23.

22 This formula converts temperature in degrees Fahrenheit (F) to kelvin (K)

$$K = \frac{5}{9}(F - 32) + 273$$

A pottery oven is heated to 2192 degrees Fahrenheit.

Work out this temperature in kelvin.

[3 marks]

Answer _____ kelvin

AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

24.

10 Put these three distances in order of size.

1.8 kilometres 1600 metres $1\frac{3}{4}$ kilometres

Start with the shortest.

[2 marks]

Shortest distance _____

_____

Longest distance _____

AQA Thursday 6 June 2019 – Morning (Calculator) Foundation Tier

25.

4 How many millimetres are equal to 3.27 metres?

Circle your answer.

[1 mark]

32.7 327 3270 32 700

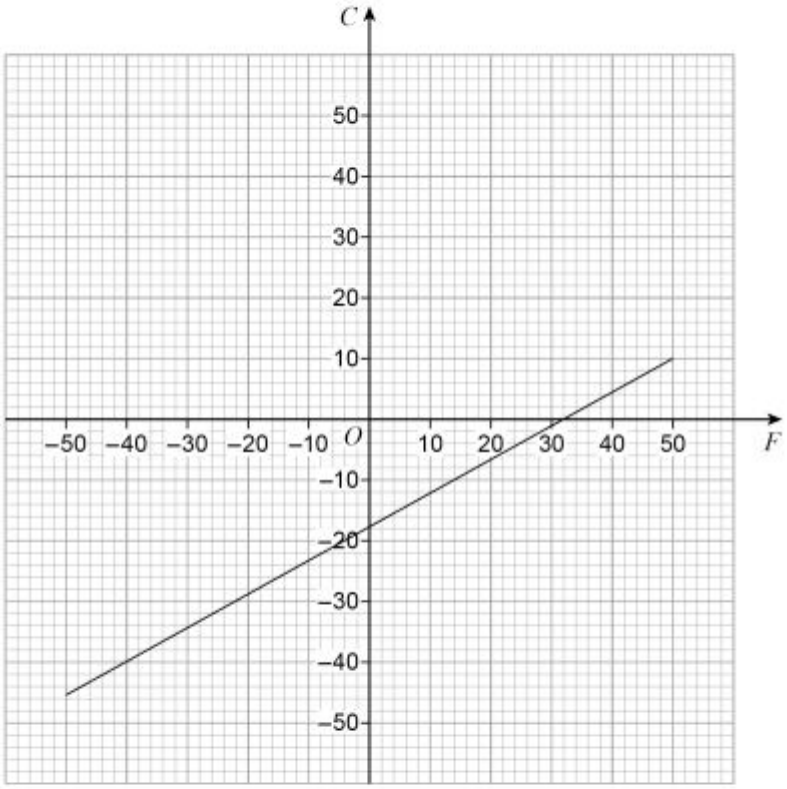
26.

16 The graph below is used to convert between

temperature in degrees Fahrenheit (F)

and

temperature in degrees Celsius (C).



16 (a) Use the graph to convert 40 degrees Fahrenheit into degrees Celsius.

[1 mark]

Answer _____ degrees Celsius

At one temperature, T,

the number of degrees Celsius is **double** the number of degrees Fahrenheit.

The graph of $C = 2F$ can be drawn to help find this temperature.

16 (b) On the grid opposite, draw the graph of $C = 2F$ for values of F from –25 to 25

You may use the table to help you.

[2 marks]

F	–25		
C	–50		

16 (c) Use your graph to estimate the value of T.

Give your answer in degrees Celsius.

[2 marks]

Answer _____ degrees Celsius

AQA Thursday 11 June 2019 – Morning (Calculator) Foundation Tier

27.

14 In this question use

1 cubic foot = 6.23 gallons

1 cubic foot = 0.028 cubic metres

Convert 3115 gallons into cubic metres.

[3 marks]

Answer _____ m^3

AQA Monday 12 November 2018 – Morning (Calculator) Foundation Tier

28.

1 Add 8 mm to 7 cm

Circle your answer.

[1 mark]

150 mm 1.5 cm 7.8 cm 708 mm

AQA Thursday 7 June 2018 – Morning (Calculator) Foundation Tier

29.

9 In this question, use

1 foot = 12 inches

1 inch = 2.5 centimetres

Change 5 feet 8 inches to centimetres.

[3 marks]

Answer _____ cm

AQA Tuesday 12 June 2018 – Morning (Calculator) Foundation Tier

30.

4 Circle the shortest length.

[1 mark]

1200 cm 0.13 km 110 m 140 000 mm

AQA Thursday 2 November 2017 – Morning (Non-Calculator) Foundation Tier

31.

2 How many millimetres are there in 7.5 centimetres?

Circle your answer.

[1 mark]

0.75 70.5 75 750 7500

AQA Thursday 2 November 2017 – Morning (Non-Calculator) Foundation Tier

32.

19 Use 2 gallons = 9 litres to convert 17 gallons into litres.

[3 marks]

Answer _____ litres

AQA Monday 6 November 2017 – Morning (Calculator) Foundation Tier

33.

17 Here is a formula to convert degrees Celsius (°C) to degrees Fahrenheit (°F).

$$F = 1.8C + 32$$

F is the number of degrees Fahrenheit

C is the number of degrees Celsius

17 (a) Show that –40°C = –40°F

[2 marks]

17 (b) The temperature is –15°C

Nick says,

"Because the temperature is negative in Celsius, it **must** be negative in Fahrenheit."

Is he correct?

You **must** show your working.

[1 mark]

Answer _____

AQA Wednesday 8 November 2017 – Morning (Calculator) Foundation Tier

34.

4 What is a **litre** a unit of?

Circle your answer.

[1 mark]

area density mass capacity

AQA Thursday 25 May 2017– Morning (Non-Calculator) Foundation Tier

35.

19 (a) Use 8 km/h = 5 mph to convert 96 km/h to mph

[2 marks]

Answer _____ mph

19 (b) x km/h = y mph

Use 8 km/h = 5 mph to write a formula for y in terms of x.

[2 marks]

Answer _____

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

36.

1 Which unit is most suitable for measuring the length of a tennis court?
Circle your answer.

[1 mark]

kilometres metres centimetres millimetres

AQA Thursday 8 June 2017– Morning (Calculator) Foundation Tier

37.

14 In this question, use

1 kilogram = 2.2 pounds
1 stone = 14 pounds

Change 70 kilograms into stones.

[3 marks]

Answer _____ stones

AQA Sample Paper 1– Morning (Non-Calculator) Foundation Tier

38.

1 How many centimetres are there in 3.7 metres?

Circle your answer.

[1 mark]

0.037 0.37 37 370