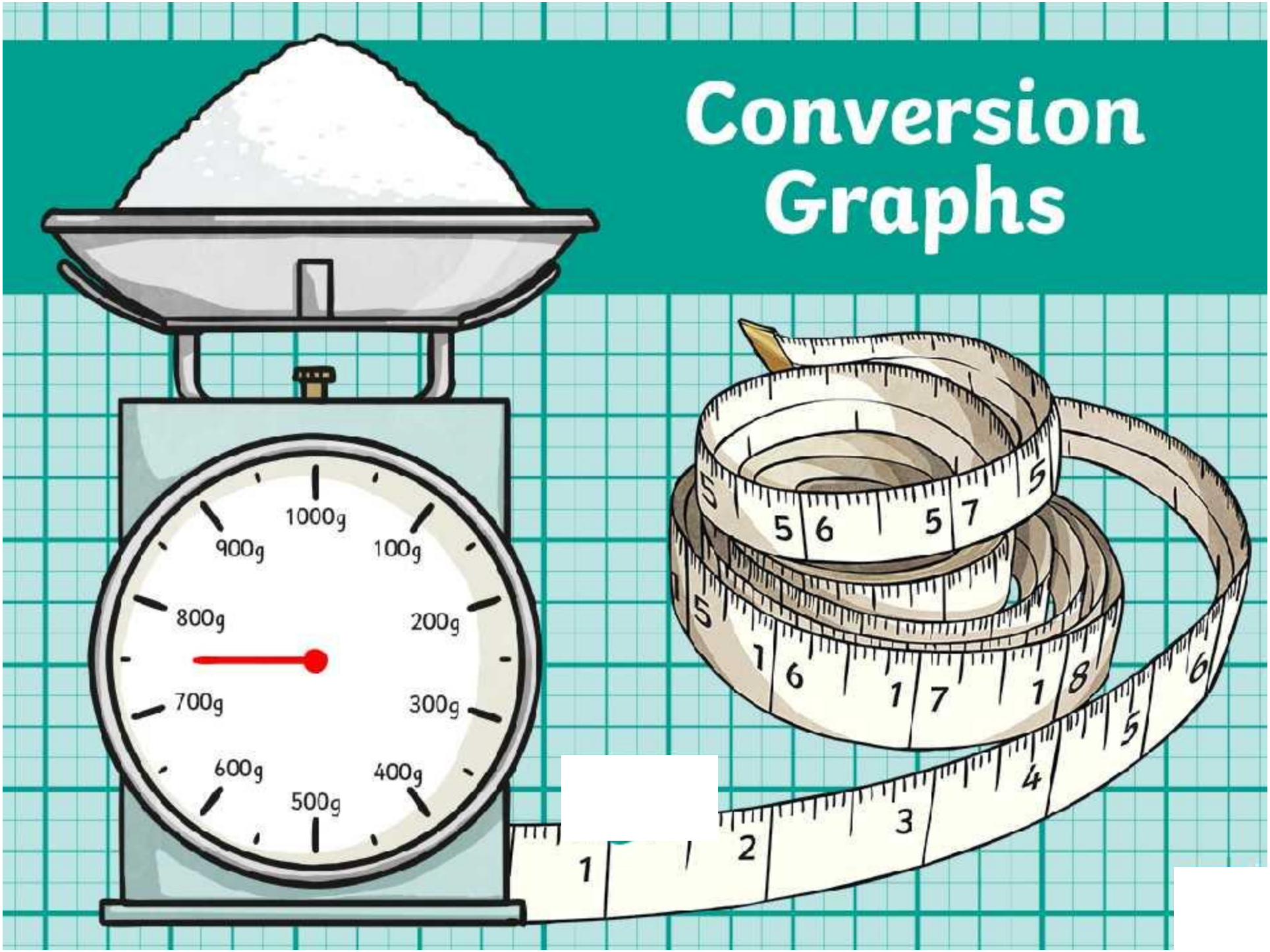
Conversion Graphs



What Is a Conversion Graph?

A **conversion** graph shows the relationship between two different ways of measuring the same thing.

The relationship is shown by a line on the graph that can then be used to read off the matching amounts. The **same** volume of milk could be measured as 1 pint or 568ml.

How many ways can you think of measuring **Distance/Length** and **Weight?**

Think About It

Distance/Length:
mm, cm, m, miles, km, yards, feet, lengths, spans, cubits, hands, furlongs, light years.
Weight:
mg, g, kg, stones, pounds, ounces, tonnes

Think About It Answers

Why Do We Need Conversion Graphs?

Conversion graphs are a quick and easy way to change from one unit of measure to another without having to do any calculations. All you have to do is read from the line on the graph.

We still need to convert between measurements in this day and age because, in the UK, we regularly use a mix of imperial and metric measurements such as pints, cm, miles, km, stones and grams. Also, the rest of the world use a range of measurements so we need to be able to convert between these.

Why Do We Need Conversion Graphs?

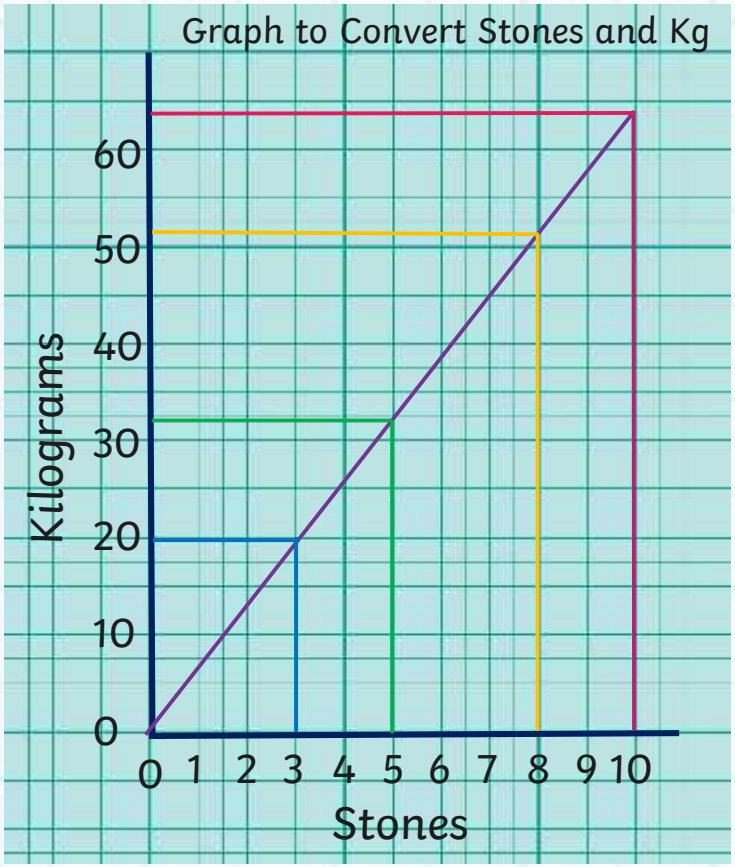
Can you make two lists of measurements: **Imperial and Metric**

Imperial	**Metric**
inches	grams
miles	kilometres
pounds	kilograms
ounces	millilitres
stones	centimetres
pints	metres
gallons	litres

Note It

Note It Answers

Reading the Graphs

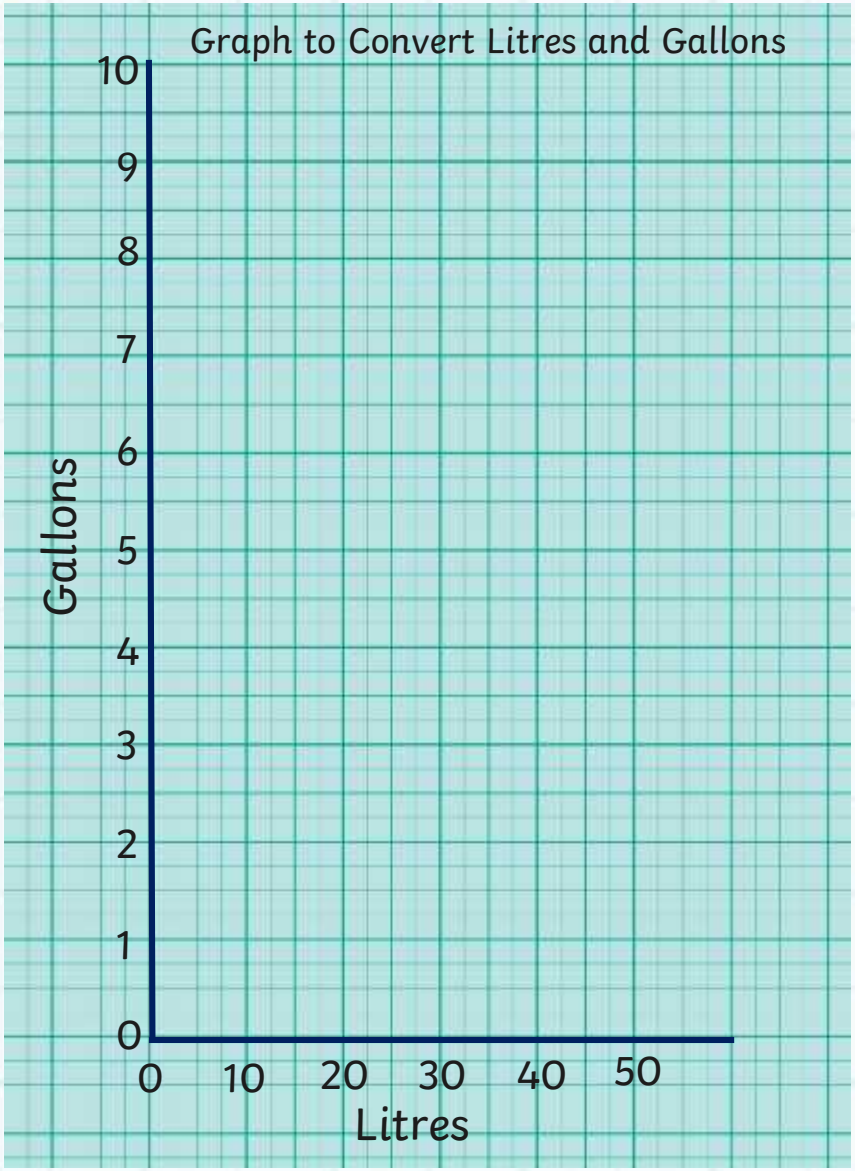


Reading from a conversion graph is simple if you look carefully. Make sure you have identified which axis is which.
From the amount you are given, follow this to the line and then find where that line sits on the other axis.

Use the graph to answer these:
8 stones = ?
20kg = ?
5 stones = ?

Try It

Try It Answers

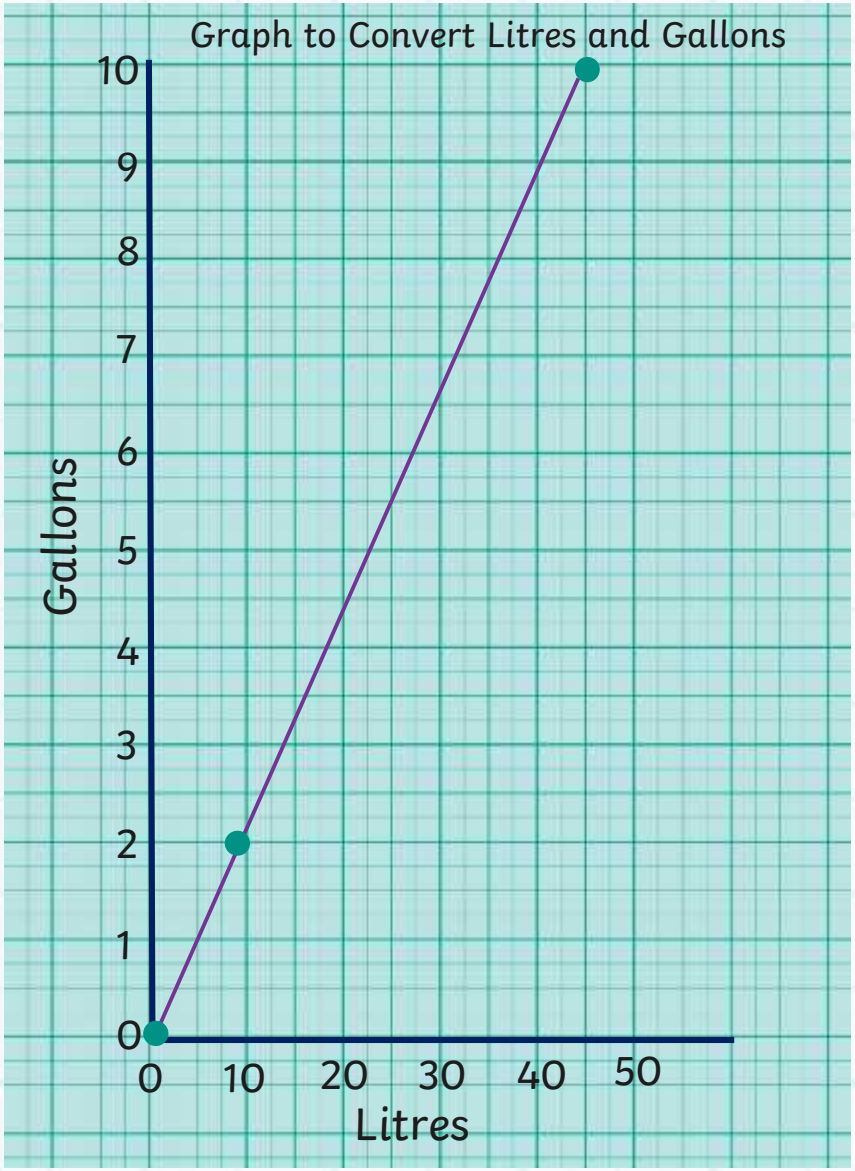


Drawing the Graphs

To draw your own graph, simply follow these instructions:

1. Draw two axes and label them with the two units you need to use. Don't forget the title for your graph.

2. Number each axis making sure that all numbers are on thick blue lines (not in the gaps) and the spaces between numbers are consistent along each axis.



Drawing the Graphs

3. Plot 3 points that you know on the graph.

4. Join the 3 points with a ruler. They should form one straight line.

Practice It

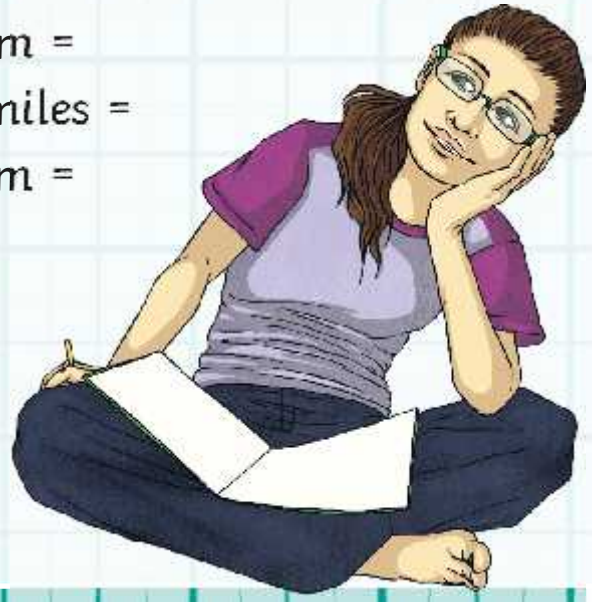
Conversion Graphs 1
Miles and Kilometres

Use the blank graph below or draw your own on graph paper to create a conversion graph to convert distances between miles and kilometres.

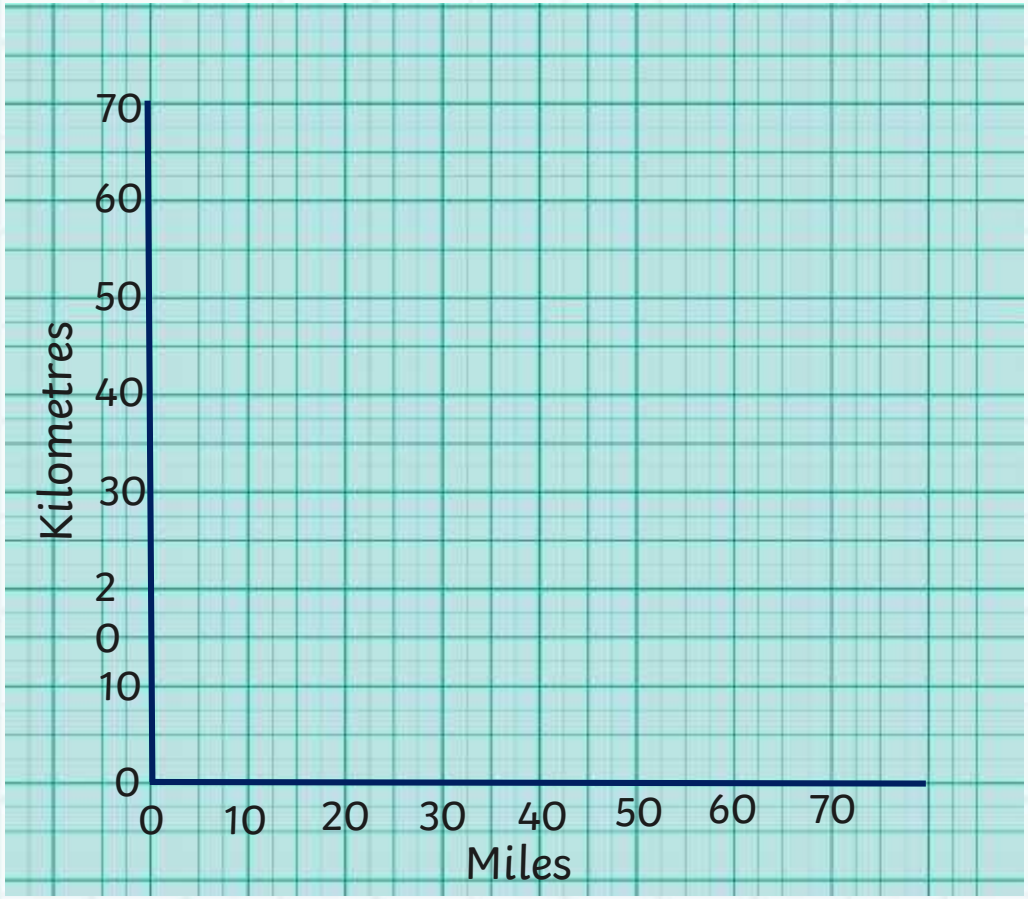
1. First of all, plot the following points on the graph:
   a. 8km = 5 miles
   b. 20 miles = 32km
   c. 16km = 10 miles
   d. 0 miles = 0km

2. Now, using a ruler, join up the points with a straight line.

3. Now use the line on your graph to finish the following conversions:
   a. 15 miles =
   b. 30km =
   c. 35 miles =
   d. 49km =



Conversion Graphs 1
Miles and Kilometres



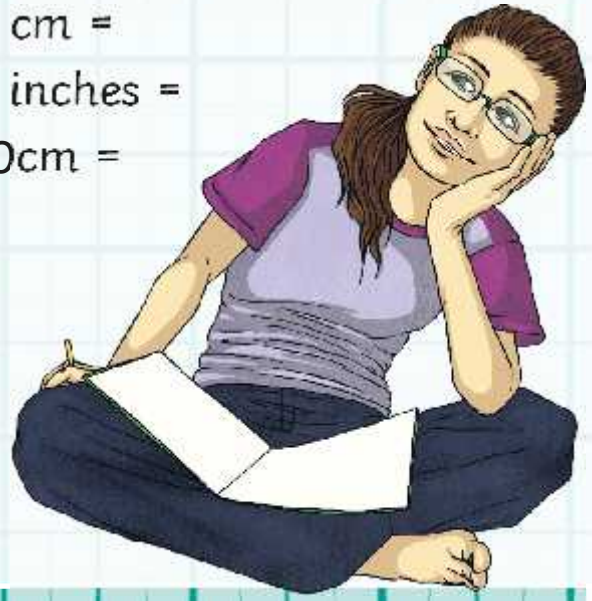
Conversion Graphs 2
Centimetres and Inches

Use the blank graph below or draw your own on graph paper to create a conversion graph to convert lengths between centimetres and inches.

1. First of all, plot the following points on the graph:
   a. 4 inches = 10cm
   b. 51cm = 20 inches
   c. 10 inches = 25cm
   d. 0cm = 0 inches

2. Now, using a ruler, join up the points with a straight line.

3. Now use the line on your graph to finish the following conversions:
   a. 16 inches =
   b. 60 cm =
   c. 30 inches =
   d. 100cm =



Conversion Graphs 2
Centimetres and Inches

Conversion Graphs 3
Celsius and Fahrenheit

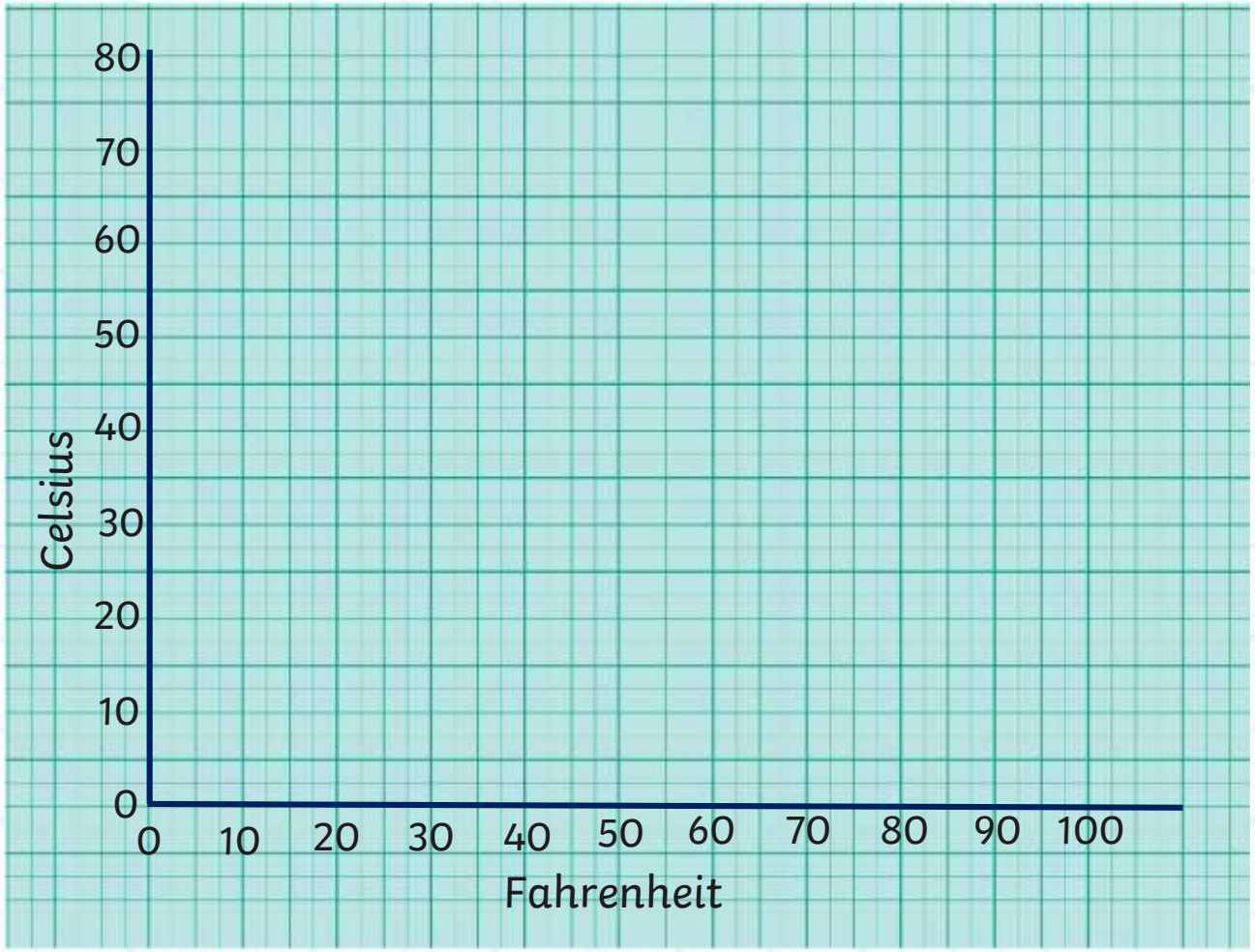
Use the blank graph below or draw your own on graph paper to create a conversion graph to convert temperatures between Celsius and Fahrenheit.

1. First of all, plot the following points on the graph:
   a. 10°C = 50°F
   b. 32°F = 0°C
   c. 5°C = 41°F
   d. 68°F = 20°C

2. Now, using a ruler, join up the points with a straight line.

3. Now use the line on your graph to finish the following conversions:
   a. 60°F =
   b. 25°C =
   c. 100°F =
   d. 32°C =

Conversion Graphs 3
Celsius and Fahrenheit



Glossary

Conversion	Changing from one thing to another
Furlongs	A measurement used in horse racing. There are 8 furlongs in mile.
Hands	Horses' heights are measured in hands. 1 hand is 10.16cm.
Light Years	The distance (not time) that light travels in 1 year. It is about 5.88 trillion miles.

Back

Answers

Answers to be within 3 units to be accurate.

Miles and Kilometres

3.

a. 15 miles = 24km
b. 30km = 19 miles
c. 35 miles = 56km
d. 49km = 31 miles

Centimetres and Inches

3.

a. 16 inches = 41cm
b. 60cm = 24 inches
c. 30 inches = 76cm
d. 100cm = 39 inches

Celsius and Fahrenheit

3.

a. 60°F = 16°C
b. 25°C = 77°F
c. 100°F = 38°C
d. 32°C = 90°F