

Key Stage 2

Maths



Study Guide

Everything you need to know about
Maths at Key Stage 2

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STATISTICS

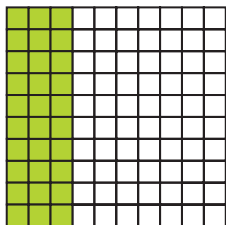
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Answers

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Percentages

WHAT ARE PERCENTAGES?



Percentages are fractions out of 100.

30 out of 100 squares are green.

That's $\frac{30}{100}$ as a fraction or 30% as a percentage.

Don't forget

% means 'per cent' or 'out of 100'.

YOU NEED TO LEARN THESE!

Fractions, decimals and percentages are different ways of saying the same thing.

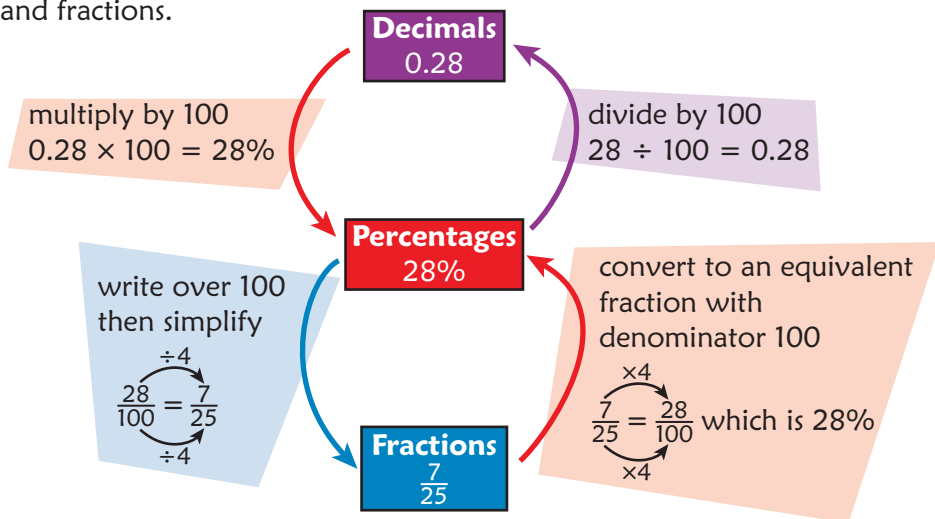
$\frac{1}{10}$, 0.1 and 10% all mean the same.

Fractions	$\frac{1}{100}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{3}{10}$	$\frac{1}{2}$	$\frac{3}{4}$
Decimals	0.01	0.1	0.2	0.25	0.3	0.5	0.75
Percentages	1%	10%	20%	25%	30%	50%	75%



FRACTIONS, DECIMALS & PERCENTAGES

This diagram shows you how to convert between decimals, percentages and fractions.



QUICK QUIZ

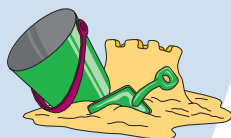
- What is 37% as a decimal?
- What is 22% as a fraction?
- What is 0.95 as a percentage?
- What is $\frac{7}{50}$ as a percentage?

Length, mass & capacity

LENGTH

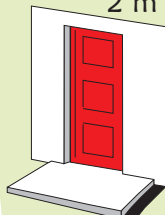
Distances, heights and perimeters are all lengths. Lengths are measured in millimetres (mm), centimetres (cm), metres (m) or kilometres (km).

A grain of sand is about 1 mm wide



A fingernail is about 1 cm wide.

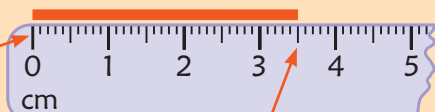
A door is about 2 m high.



Long distances are measured in kilometres.

You can measure short lengths using a ruler.

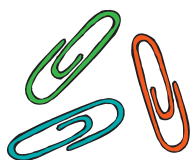
Make sure you measure from the zero mark.



The line is 3.5 cm long.

MASS (WEIGHT)

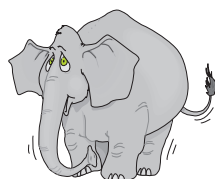
Mass is measured in grams (g), kilograms (kg) or tonnes (t).



A paper clip weighs about 1 g.



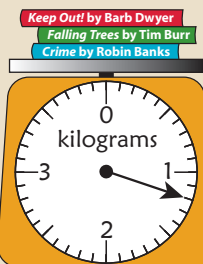
A bag of sugar weighs 1 kg.



Heavier things are weighed in tonnes.

EXAMPLE

What is the total weight of these books?

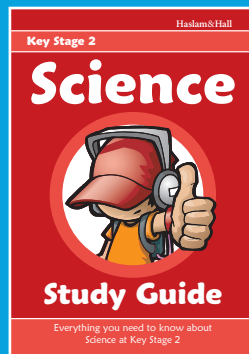
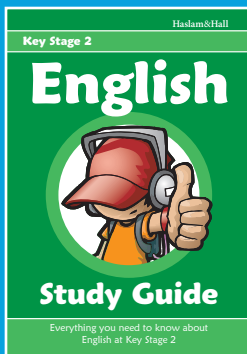
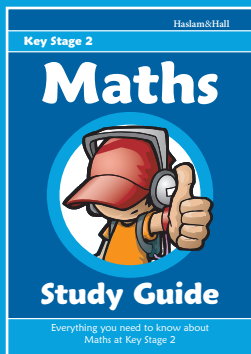


Tip Start by working out what each division on the scale is worth.

1 kilogram is 1000 grams.
There are 10 divisions in each kilogram.
So each division is worth 100 g.
The pointer is 2 divisions past 1 kg,
so the book weighs 1 kg and 200 g.
(You could write this as 1.2 kg.)

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