Knowledge Organiser

Number

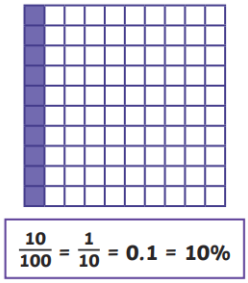
Year 6

Percentages

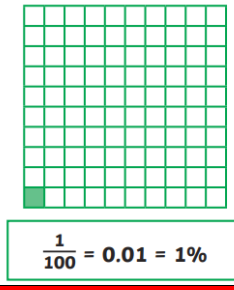
Using our knowledge of fractions and decimals can help us develop our understanding of percentages. Percentages are used in real life in many situations: discounts in shops, bank interest rates and statistics in the news.

Builds from Year 5:	This year:	Leads to Key Stage 3:
Equivalent fractions, decimals and percentages. Recognise the per cent symbol (%). To understand that per cent relates to 'number of parts per 100'.	Recall equivalences between fractions, decimals and percentages. Calculate a percentage. Solve problems involving fractions, decimals and percentages.	Work interchangeably with terminating decimals and their corresponding fractions.

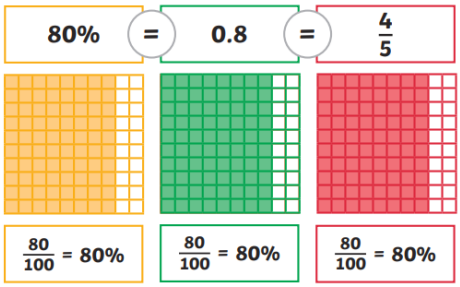
Equivalent Fractions, Decimals & Percentages



$\frac{10}{100} = \frac{1}{10} = 0.1 = 10\%$



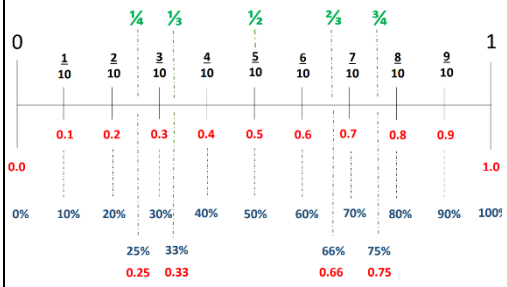
$\frac{1}{100} = 0.01 = 1\%$



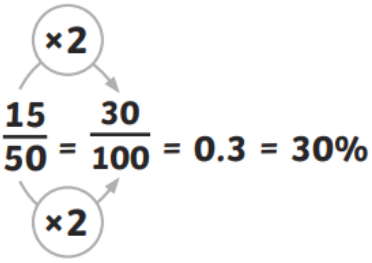
Converting Fractions to Percentages

There are a few ways to convert fractions to percentages.

Use our knowledge of equivalent fractions and decimals.



Convert the fraction to have a denominator of 100.



Divide the numerator by the denominator and multiply by 100.

$\frac{2}{5}$

$2 \div 5 = 0.4$

$5 \overline{)2.0}$ (0.2)

$0.4 \times 100 = 40$

$\frac{2}{5} = 40\%$

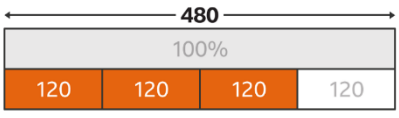
Calculate a Percentage

75% of 480

Find 25% by dividing by 4. **120**

75% = 25% x 3

120 x 3 = 36



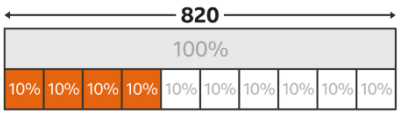
75% of 480 is 360

40% of 820

Find 10% by dividing by 10. **82**

40% = 10% x 4

82 x 4 = 328



40% of 820 is 328

Key Vocabulary

per cent (%) = out of 100 **percentage** **equivalent fraction** **equivalent decimal** **convert** **whole**