

Key Vocabulary	
Fraction	Any part of a group, number or whole.
Mixed Number	Number written as a whole number and a fraction
Top-heavy fraction (Improper Fraction)	Numerator of fraction is larger than denominator
Percentage	Number out of 100
Decimal	Figures placed to the right of a decimal point, denoting a number not expressed as an integer.
Proportion	A part to whole comparison
Simplify	To reduce the numerator and denominator of a fraction to the smallest numbers possible
Cancel	To divide the numerator and denominator by a common factor.

Key facts / Diagrams		
Fraction	Simplified Fraction	Percent
$\frac{50}{100}$	$\frac{1}{2}$	50%
$\frac{25}{100}$	$\frac{1}{4}$	25%
$\frac{75}{100}$	$\frac{3}{4}$	75%
$\frac{20}{100}$	$\frac{1}{5}$	20%
$\frac{10}{100}$	$\frac{1}{10}$	10%
<p><b>A percentage is just a type of fraction.</b>                      50% means 50 parts per hundred.</p> <p>Or <math>\frac{50}{100} = \frac{1}{2} = 0.5</math></p>		

Common misconceptions
<ul style="list-style-type: none"> <li>A fraction can be visualised as divisions of a shape (especially a circle) but some pupils may not recognise that these divisions must be equal in size, or that they can be divisions of any shape.</li> <li>Pupils may not make the connection that a percentage is a different way of describing a proportion</li> <li>Pupils may think that it is not possible to have a percentage greater than 100%</li> </ul>

Worked examples
<p>What is 5 as a fraction of 20?</p> $\frac{5}{20}$
<p><b>Turning a mixed number into a top heavy fraction</b></p> $3 \frac{1}{10} = \frac{31}{10}$ <p>Multiply these numbers together = 30                      Add on the number on top = 31 (this becomes the top number)                      The number at the bottom stays the same.</p>