

## Fractions

	<b>Milestone 1 (KS1)</b>	<b>Milestone 2 (Lower KS2)</b>	<b>Milestone 3 (Upper KS2)</b>
<b>Recognising Fractions</b>	<ul style="list-style-type: none"> <li>- Recognise, find and name a half as one of two equal parts of an object, shape or quantity.</li> <li>- Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</li> <li>- Recognise, find, name and write fractions <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity.</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</li> <li>- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</li> <li>- Round decimals with one decimal place to the nearest whole number.</li> <li>- Compare numbers with the same number of decimal places up to two decimal places.</li> <li>- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</li> <li>- Count up and down in hundredths; recognise that hundredths arise</li> </ul>	<ul style="list-style-type: none"> <li>- Compare and order fractions whose denominators are all multiples of the same number.</li> <li>- Compare and order fractions, including fractions <math>&gt; 1</math>.</li> <li>- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number.</li> <li>- Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> <li>- Read, write, order and compare numbers with up to three decimal places.</li> <li>- Identify the value of each digit in numbers given to three decimal places.</li> </ul>

		<p>when dividing an object by one hundred and dividing tenths by ten.</p> <ul style="list-style-type: none"> <li>- Compare and order unit fractions and fractions with the same denominators</li> </ul>	<ul style="list-style-type: none"> <li>- Solve problems involving number up to three decimal places.</li> <li>- Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.</li> </ul>
<b>Equivalence</b>	<ul style="list-style-type: none"> <li>- Recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>- Recognise and write decimal equivalents of any number of tenths or hundredths.</li> <li>- Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> </ul>	<ul style="list-style-type: none"> <li>- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</li> <li>- Read and write decimal numbers as fractions.</li> <li>- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> <li>- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</li> </ul>

			<ul style="list-style-type: none"> <li>- Associate a fraction with division and calculate decimal fraction equivalents.</li> <li>- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</li> <li>-</li> </ul>
<b>Solving problems</b>	<ul style="list-style-type: none"> <li>- Write simple fractions for example <math>\frac{1}{2}</math> of 6 = 3</li> </ul>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator within one whole.</li> <li>- Solve problems involving increasingly harder fractions.</li> <li>- Calculate quantities and fractions to divide quantities (including non-unit fractions where the answer is a whole number).</li> <li>- Add and subtract fractions with the same denominator.</li> <li>- Find the effect of dividing a one- or two-digit number by 10 and 100,</li> </ul>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</li> <li>- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li> <li>- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</li> <li>- Multiply simple pairs of proper fractions, writing</li> </ul>

		<p>identifying the value of the digits in the answer as ones, tenths and hundredths.</p> <ul style="list-style-type: none"> <li>- Solve simple measure and money problems involving fractions and decimals to two decimal places</li> </ul>	<p>the answer in its simplest form.</p> <ul style="list-style-type: none"> <li>- Solve problems which require knowing percentage and decimal equivalents of, <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25.</li> <li>- Divide proper fractions by whole numbers.</li> <li>- Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.</li> <li>-</li> <li>- Ratio and proportion</li> <li>- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</li> <li>- . Solve problems involving the calculation of percentages and the use of percentages for comparison.</li> </ul>
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