

Curriculum progressionNumber: Fractions, Decimals and Percentages**Counting in Fractional steps**

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>I know how to count in tenths.</p> <p>I know tenths arise from dividing an object into 10 equal parts.</p> <p>I know to find a tenth I divide a number or object by 10.</p>	<p>I know how to count in hundredths.</p>		

Recognising Fractions

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>I know to use the word half when 2 objects shared equally.</p>	<p>I know a half is one of two equal parts so I can identify half of an objective, shape or quantity.</p> <p>I know a quarter is 1 equal part of 4 so I can recognise, find and name from a length, shape, object or quantity.</p>	<p>I know a third is 1 equal part of 3 so I can recognise, find and name from a length, shape, object or quantity.</p> <p>I know a quarter is 1 equal part of 4 so I can recognise, find and name from a length, shape, object or quantity.</p>	<p>I know unit fractions always have a numerator of 1 so I can recognise, find and write fractions of objects.</p> <p>I know non-unit fractions always have a numerator of 2 or more so I can recognise, find and write fractions of objects.</p>	<p>I know hundredths arise when dividing an object by 100.</p> <p>I know hundredths can be found when dividing tenths by 10.</p>	<p>I know equivalent fractions have a multiplicative relationship.</p> <p>I know equivalent fractions so I can identify, name and write them.</p> <p>I know mixed numbers include a fraction and an integer.</p>	



		<p>I know a two-quarters is 2 equal parts of 4 so I can recognise, find and name from a length, shape, object or quantity.</p> <p>I know a three-quarters is 2 equal parts of 4 so I can recognise, find and name from a length, shape, object or quantity.</p>			<p>I know improper fractions have a numerator larger than the denominator.</p> <p>I know how to convert mixed number and improper fractions using my multiplicative knowledge.</p>	
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Comparing Fractions						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>I know how to compare unit fractions.</p> <p>I know how to order unit fractions.</p> <p>I know how to compare fractions with the same denominators.</p> <p>I know how to order fractions with the same denominators.</p>		<p>I know how to compare fractions whose denominators are all multiples of the same number.</p> <p>I know how to order fractions whose denominators are all multiples of the same number.</p>	<p>I know how to use common factors to simplify fractions using division.</p> <p>I know how to use common multiples to express fractions in the same denominator by multiplication or division.</p> <p>I know how to compare and order fractions including</p>



						fractions greater than 1.
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Addition and Subtraction of Fractions

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>I know how to add fractions with the same denominator within one whole.</p> <p>I know how to subtract fractions with the same denominator within one whole.</p>	<p>I know how to add fractions with the same denominator.</p> <p>I know how to subtract fractions with the same denominator.</p>	<p>I know how to add fractions with the same denominator.</p> <p>I know how to subtract fractions with the same denominator.</p> <p>I know how to add fractions with denominators that are multiples of the same number.</p> <p>I know how to subtract fractions with denominators that are multiples of the same number.</p>	<p>I know how to add fractions with different denominators.</p> <p>I know how to subtract fractions with different denominators.</p> <p>I know how to add fractions and mixed numbers using equivalence.</p> <p>I know how to subtract fractions and mixed numbers using equivalence.</p>

Multiplication and Division of Fractions

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					<p>I know how to multiply proper fractions by multiplying the numerators and multiplying the denominators.</p>	<p>I know how to multiply proper fractions by multiplying the numerators and</p>



					<p>I know how to multiply proper fractions by integers.</p> <p>I know how to multiply mixed numbers by integers.</p>	<p>multiplying the denominators.</p> <p>I know how to find the simplest form by dividing the numerator and denominator by common factors.</p> <p>I know how to divide proper fractions by whole numbers.</p>
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Recognising Decimals

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				<p>I know how to write a decimal to represent tenths (0.0)</p> <p>I know how to write a decimal to represent hundredths (0.00)</p> <p>I know the equivalents of tenths and hundredths so I can write as decimals.</p> <p>I know decimal equivalents to $\frac{1}{4}$ is 0.25,</p> <p>I know decimal equivalent to $\frac{1}{2}$ is 0.5.</p>	<p>I know how to write decimals as fractions.</p> <p>I know thousandths are up to 3 decimal places (0.000).</p> <p>I know the place value for up to 3 decimal places (tenths/hundredths/thousandths)</p>	<p>I know the place value for up to 3 decimal places (tenths/hundredths/thousandths)</p>



				I know decimal equivalents to $\frac{3}{4}$ is 0.75.		
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Comparing Decimals

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				I know decimal place value up to 2 decimal places (tenths and hundredths) so I can compare.	I know how to compare numbers up to 3 decimal places. (Tenths, hundredths, thousandths)	

Rounding Decimals

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				I know to look at the tenths to round decimals with 1 decimal place to the nearest whole number.	I know to look at the tenths to round decimals with 1 decimal place to the nearest whole number. I know how to look at the hundredths to round to one decimal place.	I know how to round numbers so I can solve problems which requires answers to be rounded to specific degrees of accuracy.

Multiplication and Division of Decimals

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				I know dividing by 10 moves each number 1 place to the right, including decimal places.		I know multiplying numbers by 10 moves each number 1 place to the left, including decimals.



				<p>I know dividing by 100 moves each number 2 places to the right, including decimal places.</p>		<p>I know dividing numbers by 10 moves each number 1 place to the right, including decimals.</p> <p>I know multiplying numbers by 100 moves each number 2 places to the left, including decimals.</p> <p>I know dividing numbers by 100 moves each number 2 places to the right, including decimals.</p> <p>I know multiplying numbers by 1000 moves each number 3 places to the left, including decimals.</p> <p>I know dividing numbers by 100 moves each number 3 places to the right, including decimals.</p> <p>I know how to multiply one-digit numbers with up to 2 decimal places.</p>
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						I know how to represent and calculate up to 2 decimal places in written division.
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Percentages						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					<p>I know the % symbol relates to a number of parts per hundred.</p> <p>I know a percentage is written as a fraction with a denominator of 100.</p> <p>I know a percentage can be written as a decimal out of tenths/hundredths.</p>	



Equivalence

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		I know $\frac{2}{4}$ and $\frac{1}{2}$ are equivalent so I can explain why they are the same.	I know how to represent equivalent fractions using diagrams.	I know how to represent common equivalent fractions using diagrams. I know tenths and hundredths can be decimal equivalents. I know the decimal equivalents for $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ so I can recognise and write them.	I know thousandths, tenths and hundreds have decimal equivalents.	I know a fraction is division (numerator divided by denominator) to calculate the decimal equivalence. I know equivalences between simple fractions, decimals and percentages so I can recognise them in different contexts.



Problem Solving

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			I know how to solve problems including fractions.	<p>I know how to solve problems involving harder fractions to calculate quantities and fractions to divide quantities including non-unit fractions. (answer is a whole number)</p> <p>I know how to solve simple measure problems involving fractions and decimals to 2 decimal places.</p> <p>I know how to solve simple money problems involving fractions and decimals to 2 decimal places.</p>	<p>I know how to solve problems involving numbers up to 3 decimal places.</p> <p>I know how to solve problems using percentage and decimal equivalents: $\frac{1}{2}$ - 0.5 $\frac{1}{4}$ - 0.25 $\frac{1}{5}$ - 0.2 $\frac{2}{5}$ - 0.4 $\frac{4}{5}$ - 0.8</p> <p>I know how to solve problems using fractions with a denominator or multiple of 10 or 25.</p>	I know how to solve problems which require answers to be rounded to specific degrees of accuracy.