

POS Ratio and Proportion

Statements only appear in Year 6 but should be connected to previous learning, particularly fractions and multiplication and division

			Year 4	Year 5	Year 6
			Pupils are taught throughout that decimals and fractions are different ways of expressing numbers and proportions.	Pupils use multiplication and division as inverses to support the introduction of ratio in year 6, for example, by multiplying and dividing by powers of 10 in scale drawings or by multiplying and dividing by powers of a 1000 in converting between units such as kilometres and metres.	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
				Pupils should be taught throughout that percentages, decimals and fractions are different ways of expressing proportions.	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
				They recognise that percentages are proportions of quantities as well as operators on quantities.	Solve problems involving similar shapes where the scale factor is known or can be found
					Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Year 4 Ratio and Proportion

Pupils are taught throughout that decimals and fractions are different ways of expressing numbers and proportions.

Understand vocabulary

To know that a fraction is a proportion of a whole

To know that a decimal is a fraction

Year 5 Ratio and Proportion

<p>Pupils use multiplication and division as inverses to support the introduction of ratio in year 6, for example, by multiplying and dividing by powers of 10 in scale drawings or by multiplying and dividing by powers of a 1000 in converting between units such as kilometres and metres.</p>	<p>Pupils should be taught throughout that percentages, decimals and fractions are different ways of expressing proportions.</p>	<p>They recognise that percentages are proportions of quantities as well as operators on quantities.</p>
<p>Understand to the power of 10</p> <p>Understand and use place value</p> <p>Solve simple ratio problems</p>	<p>Understand vocabulary</p> <p>To know that a fraction is a proportion of a whole</p> <p>To know that a decimal is a fraction</p> <p>To know that a percentage is a decimal and a fraction. To make relationship links between all three</p>	<p>To calculate percentages</p> <p>Understand vocabulary</p>

Year 6 Ratio and Proportion

<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p>	<p>Solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison</p>	<p>Solve problems involving similar shapes where the scale factor is known or can be found</p>	<p>Solve problems involving unequal sharing or grouping using knowledge of fractions and multiples</p>
<p>Know multiplication and division facts</p> <p>Solve missing number problems relating to direct proportion</p> <p>Solve simple ratio problems</p>	<p>Know how to calculate a percentage of a quantity (with and without calculators)</p> <p>To convert percentages to decimals</p> <p>To convert percentages to fractions</p> <p>Solve problems</p>	<p>Understand scale as ratio notation</p> <p>Calculate simple scales (greater and smaller)</p> <p>Compare two shapes and find the simple scale factor</p>	<p>Compare parts of a whole quantity using fraction/decimal/percentage and ratio notation.</p>