

Ratio and proportion, algebra

Ratio and proportion

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					<ul style="list-style-type: none">• solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts• solve problems involving the calculation/use of percentages for comparison• 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
					Spring 1

Algebra

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ 	<ul style="list-style-type: none"> recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<ul style="list-style-type: none"> solve problems, including missing number problems 			<ul style="list-style-type: none"> use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables
					Spring 2

Note – although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the ‘missing number’ objectives from Y1/2/3

Year 6 RTP

Addition, subtraction, multiplication and division

Ready to progress criteria	Block	Steps
6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).		See under Addition and subtraction, multiplication and division
6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.		See under Addition and subtraction, multiplication and division
6AS/MD-3 Solve problems involving ratio relationships.	Spring 1	5 – Scale drawing 6 – Use scale factors 7 – Similar shapes 8 – Ratio problems 9 – Proportion problems 10 – Recipes
6AS/MD-4 Solve problems with 2 unknowns.	Spring 2	9 – Find pairs of values 10 – Solve problems with two unknowns