

Year Group	Knowledge and Skills Supporting Resource: Maths No Problem Essential & most valuable knowledge for the next key stage is highlighted in yellow	Vocabulary
Year 6	<p>Ratio and Proportion</p> <ul style="list-style-type: none"> • To use ratios and fractions to compare objects; to find the relationship between ratios, percentages and fractions. • To determine the ratio of a quantity using concrete materials; to simplify ratios using concrete materials in addition to division. • To compare more than two quantities using the term 'ratio'; to use bar models to express ratios where there is more than one quantity. • To compare quantity using both fractions and ratios; to use bar model diagrams to represent ratios. • To compare quantities using bar models and common factors; to use multiplication and division to simplify ratios. • To compare numbers using ratios; to make decisions about simplifying ratios using division. • To solve word problems using a variety of heuristics including guess-and-check and bar models; to apply knowledge of ratios to word problems. • To solve word problems using the bar model heuristic; to employ division and multiplication as primary strategies when solving word problems visually. • To apply the guess-and-check and advanced bar model heuristic to ratio word problems. <p><u>Y6 National Curriculum – End Point:</u> Pupils will be taught to:</p> <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 of percentages [for example, of measures, and such as 15% of 360] and the 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. 	simplified ratio proportion