Progression of skills – Ratio and proportion and algebra Year 6	
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	Pupils should be taught to:
ъ P	 solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
o ar orti	• solve problems involving the calculation of percentages [for example, of measures, such as 15% of 360] and the use of percentages for comparison
Rati	 solve problems involving similar shapes where the scale factor is known or can be found
- a	 solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
	Pupils recognise proportionality in contexts when the relations between quantities are in the same ratio (for example, similar shapes, recipes).
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se (no	Pupils link percentages or 360° to calculating angles of pie charts.
idanc tory)	Pupils should consolidate their understanding of ratio when comparing guantities, size and scale drawings by solving a variety of problems. They might use
id gu statui	the notation a:b to record their work.
s an	Pupils solve problems involving upequal quantities e.g. 'for every and you need three speenfuls of flour' '2/5 of the class are heys'. These problems are the
Note	foundation for later formal approaches to ratio and proportion.
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	Pupils should be taught to:
	use simple formulae
bra	 generate and describe linear number sequences
vlge	 express missing number problems algebraically
4	 find pairs of numbers that satisfy an equation with two unknowns
	 enumerate possibilities of combinations of two variables
e	Pupils should be introduced to the use of symbols and letters to represent variables and unknowns in mathematical situations that they already understand,
lanc ry)	such as:
guic	- missing numbers, lengths, coordinates and angles
nd (stat	- formulae in mathematics and science
e se on-	- equivalent expressions (for example, $a + b = b + a$)
Note (n	- generalisations of number patterns
~	- number puzzles (e.g. what two numbers can add up to)