Archbishop of York's CE Junior School – Year 6 Mathematics Curriculum Plan

Week	AUTUMN TERM	SPRING TERM	SUMMER TERM
1	**Problem-solving strategies**: Simplify the problem Trial and Improvement Drawing calculations/questions	**Fractions** What is a fraction? Fraction means equal parts (associate a fraction with division) Mixed numbers to improper fractions Improper fractions to mixed numbers Calculating fractions of quantities	**Ratio & Proportion** Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Calculating percentage of amounts Calculating percentage increases Calculating percentage decreases Answering percentage questions (solve problems involving the calculation of percentages - e.g. of measures - such as 15% of 360 and the use of percentages for comparison)
2	**Number – place value** Read, write, order and compare numbers up to 10 000 000 Value of each digit Round any whole number to a required degree of accuracy Identify the value of each digit to three decimal places multiply and divide numbers by 10, 100 and 1000 Order numbers	**Fractions** Identify common factors Finding equivalent fractions: use common multiples to express fractions in the same denomination Simplifying fractions: use common factors to simplify fractions	**SATs mock**
3	**Number – positive and negative numbers** Use negative numbers in context, and calculate intervals across zero Adding and subtracting positive and negative numbers	**Fractions** Ordering fractions: use common multiples to express fractions in the same denomination Which fraction is greater? Use common multiples to express fractions in the same denomination Adding fractions with different denominators and mixed numbers Subtracting fractions with different denominators and mixed numbers	**Ratio & Proportion** The difference between Ratio and Proportion Answering ratio and proportion questions (solve problems involving similar shapes where the scale factor is known or can be found) Converting fractions into decimals Converting between different metric units (use, read, write and convert between standard units) Convert between miles and kilometres
4	**Practice SATs**	**Practice SATs**	**SATs week**
5	**Number – sequences** Are numbers within a sequence? Use knowledge of the order of operations to carry out calculations involving the four operations: brackets	**Fractions** Multiply simple pairs of proper fractions Divide proper fractions by whole numbers Increase by a fraction Decrease by a fraction	
6	**Number – prime, square & cube numbers** Identify prime numbers Identify square numbers Calculate the volume of cubes and cuboids and cube numbers (recognise when it is possible to use formulae for volume of shapes & calculate, estimate and compare volume of cubes and cuboids using standard units) Use knowledge of the order of operations to carry out calculations involving the four operations: power	**Geometry** Recognise, describe and build simple 3-D shapes, including making nets Recognise that shapes with the same areas can have different perimeters and vice versa (recognise when it is possible to use formulae for area shapes) Calculate the perimeter and area of compound shapes	
7	**Calculations** = means balancing Mental strategies Estimating	**Geometry & Measure** Answering questions from graphs interpret and construct line graphs and use these to solve problems Drawing pie charts Answering questions from pie charts interpret and construct pie charts and use these to solve problems	
8	**Calculations** Adding using a compact method Subtracting using a compact method Multiply and divide with decimals	**Missing Numbers** Writing algebraic expressions for problems (use simple formulae) Substitutions within algebraic expressions	
9	**Calculations** Multiplying using a compact method Multiples of a number	**Practice SATs**	
10	**Calculations** Divide by chunking Divisibility rules	**Missing Numbers** Writing algebraic expressions for patterns (shifting tables): generate and describe linear number sequences Solving algebraic expressions find pairs of numbers that satisfy an equation with two unknowns	

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11	**Calculations** Divide using a compact method Unequal sharing Rounding up or down after dividing?	**Missing Numbers** Calculate and interpret the mean as an average Work out missing numbers within the mean Inverse Inverse (when not to use it)	
12	**Geometry** Describe positions on the full coordinate grid (all four quadrants) Finding missing co-ordinates Draw and translate simple shapes on the coordinate plane	**Geometry & Measure – properties of shape** Calculate the area of parallelograms and triangles Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Find unknown angles in triangles, quadrilaterals and regular polygons Find missing angles that meet at a point, on a straight line or vertically opposite	
13	**Geometry** Reflect simple shapes in the axes Drawing shapes using a protractor (draw 2-D shapes using given dimensions and angles)		
14			