	Accumulative over the year		
Year 6 Maths Achievement Name: _____ Class: _____	Secure learning	Using and applying	
At the beginning of a unit, before it is taught, elicit understanding of previous and present year's objectives. Secure learning needs a green tick if understanding of objective is not required and children can go straight on to securing and enriching understanding through problem solving and reasoning activities. Secure understanding must be shown using a black tick (except green tick to show understanding prior to first cycle of teaching).		Problem solving	Reasoning
Number			
Read, write, order and compare numbers up to 10 million			
Round any whole number from nearest 10 to 10 000.			
Use negative numbers in context and calculate intervals.			
Round to nearest 10, 100, 1000, 10 000, 100 000.			
Solve number and practical problems related to all of the above.			
Addition, Subtraction, Multiplication and Division			
Multiply 4 digit numbers by 2 digit numbers using long multiplication.			
Divide 4 digit numbers by 2 digit numbers using long division.			
Divide 4 digit numbers by 2 digit numbers using short division.			
Interpret remainders (÷) as whole numbers, fractions and with rounding.			
Identify common multiples and prime numbers.			
Perform mental calculations including with mixed operations and large numbers.			
Use their knowledge of the order of operations to carry out calculations involving the four operations			
Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why			
Solve problems involving all four operations			
Use estimation to check answers and determine, in the context of a problem, an appropriate degree of accuracy.			
Fractions including decimals and percentages			
Use common factors to simplify fractions; use common multiples to express fractions in the same denomination			
Compare and order fractions including fractions >1			
Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions			
Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = 1/8$]			
Divide proper fractions by whole numbers[for example, 1/3 divided by 2 = 1/6]			
Associate a fraction with division and calculate decimal fraction equivalents			
Identify the value of each digit in a number given to three decimal places and multiply and divide by 10, 100, 1000 giving answers up to three decimal places			
Multiply one-digit numbers with up to two decimal places by whole numbers			
Use written division methods in cases where the answer has up to two decimal places			
Solve problems which require answers to be rounded to specific degrees of accuracy			
Recall and use equivalences between simple fractions, decimals and percentages, including different contexts.			
Ratio and proportion			
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 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			
Algebra			
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.			
Measurement			
Solve problems involving the calculation and conversion of units of measure using decimal notation up to three decimal places where appropriate			
Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa, using decimal notation to up to three decimal places			
Convert between miles and kilometres			
Recognise that shapes with the same area can have different perimeters and vice versa			
Recognise when it is possible to use formulae for area and volume of shapes			
Calculate estimate and compare volume of cubes and cuboids using standard units including cubic centimetres and metres and extending to other cubic units, mm and km.			
Calculate the area of parallelograms and triangles			
Geometry – Properties of shapes			
Draw 2-D shapes using given dimensions and angles			
Recognise, describe and build simple 3-D shapes , including making nets			
Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons			
Illustrate and name parts of a circle including radius, diameter and circumference and know that the diameter is twice the radius			
Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles.			
Geometry-position and direction			
Describe positions on the full coordinate grid (all 4 quadrants)			
Draw and translate simple shapes on the coordinate plane and reflect them in the axes.			
Statistics			
Interpret and construct pie charts and line graphs and use them to solve problems			
Calculate and interpret the mean as an average.			
Total number of secure objectives.			
	51	51	51