

This side should be glued to the cover of pupils' maths books.

Green – Autumn Term

Red – Spring Term

Purple – Summer Term

This should be kept as an on-going record of pupils' achievements.  
Working towards objective – no mark  
At mastery – yellow shade  
At Greater Depth – red shade

Name:	
<b>Number and Place Value</b>	
I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.	
I use negative numbers in context and calculate intervals across zero	
I round any whole number to the required degree of accuracy	
<b>Addition and Subtraction</b>	
I can perform mental calculations, including with mixed operations and large numbers.	
I use knowledge of the order of operations to carry our calculations involving the four operations.	
I use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.	
I use knowledge of the order of operations to carry our calculations involving the four operations	
I can solve addition & subtraction multi-step problems in contexts, deciding which operations & methods to use & why.	
<b>Statistics</b>	
I interpret and construct: pie charts; line graphs and use these to solve problems	
I can calculate and interpret the mean as an average	
<b>Algebra</b>	
I can express missing number problems algebraically and use simple formulae.	
I can find pairs of numbers that satisfy number sentences with two unknowns.	

## Measures

I can calculate, estimate and compare volume of cubes and cuboids using standard units, including  $\text{cm}^3$  and  $\text{m}^3$ , and extending to other units such as  $\text{mm}^3$  and  $\text{km}^3$ .

I can convert between miles & km.

I 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 three decimal places.

I can solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate.

I recognise when it is possible to use the formulae for area & volume of shapes.

I recognise that shapes with the same areas can have different perimeters and vice versa.

I can calculate the area of parallelograms and triangles.

I recognise when it is possible to use formulae for area & volume of shapes

## Multiplication and Division

I identify common factors, common multiples and prime numbers.

I perform mental calculations, including mixed numbers and large numbers.

I can multiply multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method of long multiplication.

I can divide numbers up to 4-digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

I can divide numbers up to 4-digits by a 2-digit number using the formal written method of short division, where appropriate, interpreting remainders according to the context.

## Geometry

I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.

I can draw 2D shapes using given dimensions & angles.

I can describe positions on the full coordinate grid, all four quadrants

I can draw and translate simple shapes on the coordinate plane and reflect them in the axes

I can recognise, describe and build simple 3D shapes, including making nets.

I recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

I illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

## Fractions

I can compare and order fractions, including fractions  $>1$ . Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

I can recall and use equivalences between simple fractions, decimals and percentages, including different contexts

I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

I can multiply simple pairs of proper fractions, writing the answer in the simplest form.

I can divide proper fractions by whole numbers.

I associate a fraction with division to calculate decimal fraction equivalents, for simple fractions

## Ratio & Proportion

I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.

I can solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360 and the use of percentages for comparison.