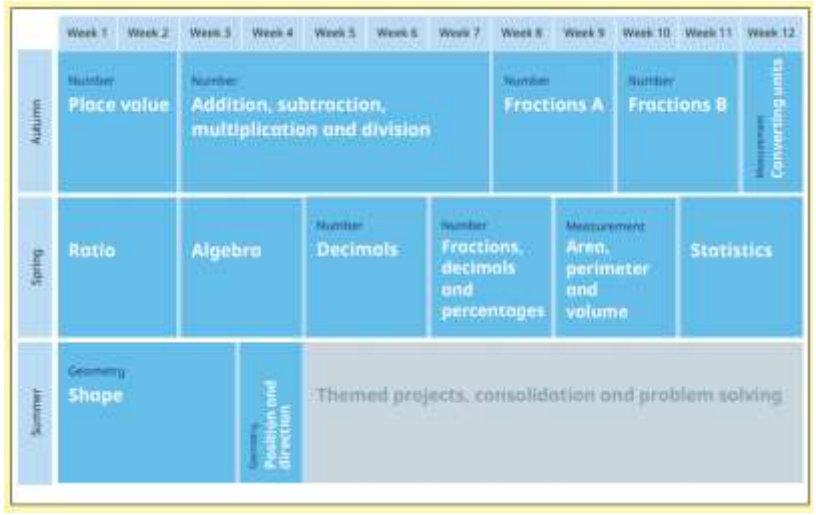
Year 6 - Long Term Planning Overview (2023 updates)



Recall Facts Year 6

- I know decimal number bonds (2 DP) for 1 and 10 eg 1.23 and 8.77 to make 10
- Read and Write numbers to at least 10 000 000(Y6 Read and write numbers)
- All multiplication facts up to 12 x 12 (Y4 consolidation) including relating this to decimal division eg 0.4 x 3 = 1.2 etc
- I can identify common factors, common multiples and prime numbers) (Y6 Prime numbers and factors)
- Prime numbers up to 50
- Composite numbers up to 50
- Recall square and cubed numbers up to 12 x 12 and 12 x 12x 12
- Recall time intervals using digital and analogue clocks. (Y5 time– consolidation)
- Recall and use equivalences between simple fractions decimals and percentages. (y5 equivalence)
- Convert between decimals/ fractions and percentages.(0.1, 0.25, 0.33, 0.66, 0.5, 0.75.)
- Halves and doubles up to 100
- Change from £10

CONVERSIONS

- Recall of metric conversions:

1 km= 1000m (1/2 km= 500m/ 0.5 km = 500m)
1m = 100cm (0.1 m = 10cm)
1 cm = 10 mm
1 kg = 1000g
1 L—1000ml
(Y5 revisiting and extension- estimate measure, weigh compare and convert units)

Number-Place Value	Number- Addition and Subtraction	Number- Multiplication and Division
• **Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit** • Identify the value of each digit to three decimal places • Round any whole number to a required degree of accuracy • Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • Use negative numbers in context, and calculate intervals across zero Solve number and practical problems that involve all of the above	• Perform mental calculations including with mixed operations and large numbers and decimals • Add and subtract whole numbers and decimals using formal written methods (columnar addition and subtraction) • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy • Use knowledge of the order of operations to carry out calculations • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving all four operations, including those with missing numbers	• **Identify common factors, common multiples and prime numbers*** • Perform mental calculations, including with mixed operations and large numbers • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • Multiply one-digit numbers with up to two decimal places by whole numbers • Divide numbers up to 4 digits by a two-digit whole number using the formal written methods of short or long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • Use written division methods in cases where the answer has up to two decimal places • Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

		• Use knowledge of the order of operations to carry out calculations • Solve problems involving all four operations, including those with missing numbers
Number- Fractions, Decimals and Percentages	**Geometry- Properties of Shapes**	**Measurement**
• Compare and order fractions, including fractions > 1 • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination • **Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts** * • Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375 and $\frac{3}{8}$) • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$) • Divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$) • Find simple percentages of amounts • Solve problems involving fractions • Solve problems which require answers to be rounded to specified degrees of accuracy • Solve problems involving the calculation of percentages (e.g. of measures and such as 15% of 260) and the use of percentages for comparison • I can solve problems involving unequal sharing and grouping , using knowledge or fractions and multiples.	• Compare/classify geometric shapes based on the properties and sizes • Draw 2-D shapes using given dimensions and angles • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice th radius • Recognise, describe and build simple 3-D shapes, making nets • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite. • I can find unknown angles in any triangle, quadrilateral and regular polygons. • I can solve problems involving similar shapes, where the scale factor is known or can be found. **• Geometry- Position and Direction** • Describe positions on the full coordinate grid (all four 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 these to solve problems • Calculate and interpret the mean as an average **• 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	• Use, read and write standard units of length, mass, volume and time using decimal notation to three decimal places • **Convert between standard units of length, mass, volume and time using decimal notation to three decimal places*** • Convert between miles and kilometres • Recognise that shapes with the same areas can have different perimeters and vice versa • Calculate the area of parallelograms and triangles • Recognise when it is possible to use formulae for area and volume of shapes • I can 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 (cm^3) and cubic metres (m^3), and extending to other units (e.g. mm^3 and km^3) • **Time intervals using digital and analogue clock** * • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate