AUTUMN – YEAR 6

NATIONAL CURRICULUM

NUMBER - NUMBER AND PLACE VALUE

Read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit (A1)

Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (A1)

Round any whole number to a required degree of accuracy (A1)

Use negative numbers in context, and calculate intervals across zero (A1)

Solve number and practical problems that involve all of the above (A1)

NUMBER - ADDITION AND SUBTRACTION

Perform mental calculations, including with mixed operations and large numbers (A2)

Use their knowledge of the order of operations to carry out calculations involving the four operations (A2)

NUMBER – MULTIPLICATION AND DIVISION

Identify common factors, common multiples and prime numbers (A2)

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy (A2)

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication (A2)

Divide numbers up to 4 digits by a two-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 (A2)

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context (A2)

Perform mental calculations, including with mixed operations and large numbers (A2)

Solve problems involving addition, subtraction, multiplication and division (A2)

Use their knowledge of the order of operations to carry out calculations involving the four operations (A2)

NUMBER – FRACTIONS INCL DECIMALS & PERCENTAGES

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

Compare and order fractions, including fractions > 1 (A3)

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions (A3, A4)

Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] (A3, A4)

Divide proper fractions by whole numbers [for example $\frac{1}{3} \div 2 = 1\frac{1}{6}$] (A3, A4)

MEASUREMENT

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate (A5)

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 3 d.p. (A5)

Convert between miles and kilometres (A5)

Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa (A5)
Note – In the WRM schemes, time conversions are covered in Y5; the Y6 block concentrates on metric units. ***Time may need revisiting.***

READY TO PROGRESS

NUMBER AND PLACE VALUE - NPV

6NPV-1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000) (A1 Step 4)

6NPV-2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning (A1 Steps 1, 2, 3)

6NPV-3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts (A1 Steps 6, 7)

6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts (A1 Step 5 / A5 Step 2 / Sp6 Steps 5, 6)

ADDITION, SUBTRACTION, MULTIPLICATION AND DIVISION – AS/MD

6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding (A2 Steps 8, 10, 13, 14, 17)

FRACTIONS

6F-1 Recognise when fractions can be simplified, and use common factors to simplify fractions (A3 Steps 1, 2)
6F-2 Express fractions in a common denomination and use this to compare fractions that are similar in value (A3 Step 3)
6F-3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy (A3 Step 3, 4)

SAINT JOHN'S

SPRING – YEAR 6

NATIONAL CURRICULUM

NUMBER – FRACTIONS INCLUDING DECIMALS AND PERCENTAGES

Identify the value of each digit in numbers given to three decimal places (Sp3)

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] (Sp3, Sp4)

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts (Sp3, Sp4)

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 (Sp1)

Solve problems involving the calculation/use of percentages for comparison (Sp1)

Solve problems involving similar shapes where the scale factor is known or can be found (Sp1)

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples (Sp1)

ALGEBRA

Use simple formulae (Sp2)

Generate and describe linear number sequences (Sp2)

Express missing number problems algebraically (Sp2)

Find pairs of numbers that satisfy an equation with two unknowns (Sp2)

Enumerate possibilities of combinations of two variables (Sp2)

MEASUREMENT

Recognise that shapes with the same areas can have different perimeters and vice versa (Sp5)

Recognise when it is possible to use formulae for area and volume of shapes (Sp5)

Calculate the area of parallelograms and triangles (Sp5)

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 (Sp5)

GEOMETRY – PROPERTIES OF SHAPES

STATISTICS

Interpret and construct pie charts and line graphs and use these to solve problems (Sp6)

Calculate and interpret the mean as an average (Sp6)

READY TO PROGRESS

NUMBER AND PLACE VALUE - NPV

6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts (A1 Step 5 / A5 Step 2 / Sp6 Steps 5, 6)

ADDITION, SUBTRACTION, MULTIPLICATION AND DIVISION – AS/MD

6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number) (Sp1 Steps 1, 5, 6, 7, 8, 9, 10)

6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number) (Sp1 Steps 1, 5 – 10)

6AS/MD-3 Solve problems involving ratio relationships (Sp1 Steps 5-10)

6AS/MD-4 Solve problems with 2 unknowns (Sp2 Steps 9, 10)

GEOMETRY – G

6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems (Sp5 Steps 1-6)

SAINT JOHN'S

SUMMER – YEAR 6

NATIONAL CURRICULUM

NUMBER - NUMBER AND PLACE VALUE
NUMBER - ADDITION AND SUBTRACTION
NUMBER – MULTIPLICATION AND DIVISION
NUMBER – FRACTIONS INCLUDING DECIMALS AND PERCENTAGES

Not explicitly covered in WR planning but will be revisited through themed projects, consolidation and problem solving activities

GEOMETRY – PROPERTIES OF SHAPES

Draw 2-D shapes using given dimensions and angles (Su1)

Compare and classify geometric shapes based on their properties and sizes (Su1)

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius (Su1)

Recognise, describe and build simple 3-D shapes, including making nets (Su1)

Find unknown angles in any triangles, quadrilaterals, and regular polygons (Su1)

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles (Su1)

Describe positions on the full coordinate grid (all four quadrants) (Su2)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes (Su2)

READY TO PROGRESS

GEOMETRY – G

6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems (Su1 Steps to follow)