ST. DUNSTAN'S

Maths progression

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1					
Number: **Place value** Count in 1s. Count, read and write numbers to 10. Count forwards and backwards within 10. Adding and subtracting 1 or 2 (within 10). Number bonds to 10. **Measurement** Days of the week.	**Number:** **Place value** Count, read and write numbers from 1-20 in numerals and words. 1 more. Addition and subtraction within 20 using number bonds. **Geometry**- Recognise, name and sort 2D and 3D shapes. **Measurement** Months of the year.	**Number**: **Place value** Count and understand numbers within 20. 1 more and 1 less. Addition and subtraction of 1-digit and 2-digit numbers to 20. **Measurement-** Sequence events in chronological order (for example, before, after, next, first)	**Number**: **Place value** Count in tens within 50. Number bonds to 20, doubles and find the missing numbers. **Measurement-** Compare and begin to measure: - lengths and heights, - mass/weight -capacity and volume - time	**Number**: **Place value** Repeated addition (2, 5, 10) **Multiplication and division** Count in multiples of 2's, 5's and 10's. Making equal groups and sharing. **Fractions** Recognise, name and find half and a quarter of a shape and a quantity. **Measurement** Describe position, direction and movement including turns.	**Number**: **Place value** Count to and across 100 forwards and backwards. **Measurement** **Time** Tell the time to the hour and half past the hour. **Money** Recognise and know the value of coins and notes.
Year 2					
Number: **Place value** Read and write numbers to 100 in numerals and words.	**Addition and Subtraction** Add Three 1-digit numbers. Add and subtract across 10.	**Number:** **Place value** Odd and even numbers. **Multiplication and division**	**Number:** **Place value** Count in 3's forwards and backwards.	**Number:** **Fractions** Recognise unit fractions (a half, a quarter and a third) and non-unit fractions (three-quarters).	**Number:** **Place value** Addition and subtraction facts to 20 and 100.

Compare and order numbers from 0 to 100. Count in 2's, 5's, 10's forwards and backwards. **Addition and subtraction** Number bonds to 10 and 100. Add and subtract -2-digit numbers and ones - 2-digit numbers and tens	10 more and 10 less. Add and subtract two 2-digit numbers. Solve missing number problems. **Geometry:** Identify and describe the properties of 2-D shapes (number of sides and line of symmetry) and 3-D shapes (number of edges, vertices and faces).	Recognise and make equal groups. Introduce the symbol for multiplication (x) and division (÷). Make equal groups by sharing and grouping. Doubling and halving. Multiply and divide by 2, 5 and 10. **Measurement: Money** Count money in pounds (£) and pence (p). Recognise the value of coins and notes. Make the same amount. Compare amounts of money. Calculate with money in the same unit, including finding change. **Times-tables** X2 X10 X5	**Measurement: Length and height** Measure in cm and m. Compare and order lengths and heights. **Mass, capacity and temperature** Measure in grams (g) and kilograms (kg). Compare mass. Measure in millilitres (ml) and litres (l). Compare volume and capacity. Know temperature (°C) and read scales. **Statistics:** Make tally charts.	Recognise equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ Count in fractions up to a whole. **Measurement: Time** Tell and write the time (o'clock and ½ past, ¼ to and past) To know time to five minutes. To know the number of: - minutes in an hour. - hours in a day.	**Statistics:** Interpret and draw pictograms, block diagrams and tables and answer simple questions. **Geometry:** Compare and sort 2-D and 3-D shapes. Identify 2-D shapes on the surface of 3-D shapes. Position language, describe movement and turns.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3					
Number: **Place value** Represent numbers to 1000. Recognise place value of a 3-digit number. Compare and order numbers to 1000. **Addition/subtraction** Apply number bonds within 10. Add and subtract 1's, 10's, 100's and across 10 and 100. Add and subtract two 2-digit and 3-digit numbers using formal written method.	**Number:** **Multiplication& division** Count in multiples of 4, 8, 50 and 100. Multiples of 2, 5 and 10. To multiply and divide by 3, 4 and 8. **Times-tables** X3 X4 X8	**Number:** **Multiplication and division** Multiplying a 2-digit number by a 1-digit number. Divide-a 2-digit number by a 1 digit number with no remainders. **Fractions** Unit fractions-numerators and denominators. Count up and down in tenths. Compare and order unit fractions and fractions with the same denominators. Recognise equivalent fractions with small denominators.	**Measurement:** Length & perimeter measure in m, cm and mm. Equivalent lengths (m and cm, cm and mm) Compare, add and subtract length. Measure and calculate perimeter. **Mass and capacity** Measure and compare using kg and g (mass) L and ml (capacity). Add and subtract mass and capacity.	**Number:** **Fractions** Add and subtract fractions with the same denominator. Recognise, find and write fractions of a set objects. **Measurement** **Money** Add and subtract in £ and p. Find change. **Time** Tell and write the time on an analogue clock. Tell and write the time on12 hour and 24 hour clocks. Tell the time to the nearest 5 minutes and the nearest minute. Compare duration of time. Read Roman Numerals to 12. Number of seconds in a minute/days in each month	**Geometry:** Recognise turns and angles. Identify horizontal and vertical and perpendicular and parallel lines. Compare and measure and draw angles. Draw and describe 2-D and 3-D shapes in different orientations. **Statistics:** Interpret and present data using pictograms, bar charts and tables

Year 4

Number: Place value	Number: Place value	Number: Multiplication and division	Number: Multiplication and division	Number: Decimals	Statistics
Number: **Place value** Represent numbers to 1000 & 10,000. Find 1000 more or less than a given number. Compare, order and estimate numbers beyond 1000. Round to the nearest 10, 100, 1000. **Multiplication and division** Multiply and divide by 6, 9 **Addition and subtraction** +/- 1, 10, 100 and 1000, +/- two 4 digit numbers with no exchange and with exchange. Add and subtract numbers with up to 4 digits using formal written methods with exchange. Solve two-step problems deciding which operation to use. Strategies to check answers including estimation and inversion. **Times-tables** X6 X9	**Number:** **Place value** Roman Numerals to 100. **Multiplication and division** Count in multiples of 6, 7, 9, 25 and 1000. Multiply and divide by 7 Factor pairs. Multiply by 1 and 0 and divide a number by itself and 1. Multiplying three numbers together. **Measurement:** **Area** Find the area of rectilinear shapes by counting the squares. **Times-tables** X7 X11 X12	**Number:** **Multiplication and division** Factor pairs. Multiply and divide by 10 and 100. Multiply 2 and 3-digit numbers by a 1-digit number. **Measurement:** **Perimeter** Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m Convert between different units of measure (km and m) **Time** Convert between analogue and digital time.	**Number:** **Multiplication and division** Divide 2 and 3-digit numbers by a 1 digit number using short division. **Fractions** Count up and down in hundredths. Compare and order mixed numbers. Compare and order improper fractions. Convert mixed numbers to improper fractions. Convert improper fractions to mixed numbers. Add and subtract fractions with the same denominator. Find and show equivalent fractions.	**Number:** **Decimals** Recognise and write tenths and hundredths. Divide 1 and 2-digit numbers by 10 and 100. Recognise the decimal equivalents for $\frac{1}{4}, \frac{1}{2}$ and $\frac{3}{4}$. Compare and order decimals. Round decimals to nearest whole number. **Measurement:** **Money** Write money using decimals. Convert between £ and p. Compare, estimate and calculate with money. **Time** Convert between 12 hour and from 24 hour clocks.	**Statistics** Interpret and draw charts and line graphs. Solve problems using charts and graphs. **Geometry-** Identify acute and obtuse angles. Compare and order angles. Compare and classify regular and irregular geometric shapes including, triangles, quadrilaterals and polygons. Identify lines of symmetry. Use and plot co-ordinates. Translate a shape on a grid.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5					
Number: **Place value** Read, write and compare numbers to 1,000,000. Rounding numbers to 1,000,000 to the nearest 10, 100, 1,000, 10,000, and 100,000. Roman Numerals to 1000. **Decimals** Recognise, tenths, hundredths and thousandths. Order and compare numbers with up to 3 decimal places.	**Number:** **Addition and subtraction** Add numbers with more than 4 digits. Add and subtract numbers mentally. Round to check answers. Find missing numbers. Solve multi-step word problems. **Multiplication and division** Identify multiples and factors. Find factor pairs and common factors. Know prime, composite, square and cube numbers. Prime numbers to 100. Multiply and divide by 10, 100, 1,000. **Fractions** Find and recognise equivalent fractions. Recognise improper fractions and mixed	**Number:** **Multiplication and division** Multiply using the formal written method: - 4 digit number by a 1 digit number; - 2 digit by 2 digit, - 3 digit by 2 digit - 4 digit by 2 digit. Divide a 4 digit number by 1 digit with and without remainders using the formal written method (short division). Solve problems using multiplication and division. **Statistics:** Read, interpret draw and solve problems using line graphs. Read and interpret tables and timetables. **Number:** **Fractions** Multiply proper fractions and mixed numbers by whole numbers. Calculate fractions of amounts.	**Number:** **Decimals** Read and write equivalent fractions and decimals ($^{1}/_{10}$ = 0.1 and $^{1}/_{100}$=0.01, and $^{1}/_{1000}$ = 0.001) Round decimals to the nearest whole number and 1 decimal place. Recognise percentages (%) Write percentages as a fraction and a decimal. **Measurement:** **Perimeter** Calculate the perimeter of rectilinear shapes. **Area** Calculate and compare the area of rectangles and compound shapes. Estimate the area of irregular shapes.	**Geometry:** **Shape** Draw angles and measure in degrees. Estimate and compare angles. Calculate angles around a point and on a straight line. Use properties of rectangles to calculate missing facts. Distinguish between regular and irregular polygons. Identify 3-D shapes. **Position and direction** Read and plot co-ordinates. Identify and describe translation and reflection of a shape. **Number:** Multiply by 10, 100, 1,000 **Decimals** Add and subtract - decimals across 1.	**Measurement:** Convert between different units of measure (kg and g, km and m). Understand approximate conversions between metric to imperial units of measure. **Volume** Compare and estimate volume and capacity. **Number**: Count forwards and backwards in negative numbers. Compare and order and find differences.

| | numbers and convert between them.

Compare and order fractions.

Add and subtract fractions. | | | - decimals with same number of decimal places.
- with different number of decimal places. | |

<table>
<tr><td colspan="6" align="center">Year 6</td></tr>
<tr>
<td>Number:
Place value- read, write, order and compare numbers up to 10 000 000.

Use negative numbers in context, and calculate intervals across 0.

Round any whole number.

Decimals
Multiply 1-digit numbers with up to two decimal places by whole numbers.

Use equivalences between simple fractions, decimals and percentages.

Measurement:
Use, read, write and calculate with units of measure and convert between units of measure using decimal notation.</td>
<td>Addition and subtraction
Calculations- Solve addition and subtraction multi-step problems, deciding which operations and methods to use, use estimation to check answers.

Multiplication and division
Prime numbers. Common multiples and common factors.

Multiply up to 4 digits by a 2 digit whole numbers using long multiplication.

Multiply 1-digit numbers with up to two decimal places by whole numbers. Common factors and multiples. Square and cube numbers.

Division:
Short division.

Use long division to divide numbers up to 4</td>
<td>Number:
Fractions
Use factors to simplify fractions; use common multiples to express fractions in same denominator.

Compare and order fractions, including fractions > 1

Add and subtract fractions with different denominators and mixed numbers.

Multiply simple pairs of proper fractions.

Geometry:
Name parts of circles, (radius, diameter and circumference).

Recognise angles and find missing angles.

Compare and classify geometric shapes and find unknown angles in any triangles,</td>
<td>Number:
Fractions
Divide proper fractions by whole numbers.

Use equivalences between simple fractions, decimals and percentages.

Calculating fractions and decimals of amounts.

Number:
Ratio-language and symbol.

Ratio and fractions.

Using scale factors.

Ratio and proportion.

Solve ratio problems.

Geometry:
Draw 2-D shapes.

Recognise, describe and build simple 3-D shapes</td>
<td>Statistics:
Calculate and interpret the mean as an average.

Algebra
1 and 2 step function machines, form an expression, make substitutions and use formulae.

Form equations and solve 1 and 2 step equations.

Find pairs of values.</td>
<td>Statistics:
Interpret and construct pie charts and line graphs and use these to solve problems.

Algebra
Develop 1 and 2 step function machines, form an expression, make substitutions and use formulae.

Form equations and solve 1 and 2 step equations.

Find pairs of values.

Consolidation</td>
</tr>
</table>

Conversions of units of measurement of length, mass and volume. Convert between miles and kilometres.	digits by a 2-digit and interpret remainders as whole numbers. Order of operations. **Measurement:** Recognise that shapes with the same areas can have different perimeters. Recognise where it is possible to use a formulae for area and volume of shapes. Calculate, estimate and compare volume of cubes and cuboids. Calculate the area of parallelograms and triangles.	quadrilaterals, and regular polygons.	Describe positions using co-ordinates on all four quadrants. Draw and translate simple shapes and reflect them in the axes		