# St Edward's Maths Curriculum Map

## Year 4 - Maths

| Autumn 1 | Autumn 2 |
|---|---|
| **Number and place value**<br>● count in multiples of 1000<br>● find 1000 more or less than a given number<br>● recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)<br>● order and compare numbers beyond 1000<br>● identify, represent and estimate numbers using different representations<br>● round any number to the nearest 10, 100 or 1000<br>● solve number and practical problems that involve all of the above and with increasingly large positive numbers.<br>**Success criteria**<br>**Pupils can make appropriate decisions about when to use their understanding of counting, place value and rounding for solving problems including adding and subtracting.**<br>**Addition and subtraction**<br>● add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate<br>● estimate and use inverse operations to check answers to a calculation<br>● solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why<br><br>**Measurement**<br>● estimate, compare and calculate different measures, including money in pounds and pence<br><br>**Statistics**<br>● interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs<br>● solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | **Number and place value**<br>● *count in multiples of* 6, 7, 9, 25 *and 1000*<br><br>**Multiplication and divisions**<br>● recall multiplication and division facts for multiplication tables up to 12 × 12<br>● use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers<br>● recognise and use factor pairs and commutativity in mental calculations<br>● solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling and harder correspondence problems such as *n* objects are connected to *m* objects.<br>**Success criteria**<br>Pupils can explain the relationship between multiplication and division and the distributive and associative laws. They use this understanding to derive facts and solve problems.<br><br>**Geometry: properties of shape**<br>● compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes<br>● identify acute and obtuse angles and compare and order angles up to two right angles by size<br>● identify lines of symmetry in 2-D shapes presented in different orientations.<br>**Success criteria**<br>**Pupils can explain the properties of different triangles and quadrilaterals including angles and lines of symmetry.**<br>**Number and place value**<br>● *count in multiples of 1000*<br>● *find 1000 more or less than a given number*<br>● count backwards through zero to include negative numbers |

# St Edward's Maths Curriculum Map

## Year 4 - Maths

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|---|---|
| **Success criteria**<br>**Pupils can solve addition and subtraction problems in different contexts, appropriately choosing and using number facts, understanding of place value and counting and mental and written methods. They can explain their decision making and justify their solutions.** | • *recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)*<br>• *order and compare numbers beyond 1000*<br>• *identify, represent and estimate numbers using different representations*<br>• *round any number to the nearest 10, 100 or 1000*<br>• *solve number and practical problems that involve all of the above and with increasingly large positive numbers*<br>• read Roman numerals to 100 (I to C) and know that, over time, the numeral system changed to include the concept of zero and place value.<br>**Success criteria**<br>**Pupils can make appropriate decisions about when to use their understanding of counting (including counting below zero), place value and rounding for solving problems including adding and subtracting. Pupils can explain the representation of two-digit positive numbers as Roman numerals.** |

# St Edward's Maths Curriculum Map

## Year 4 - Maths

| Spring 1 | Spring 2 |
|---|---|
| **Addition and subtraction**<br>● *add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate*<br>● *estimate and use inverse operations to check answers to a calculation*<br>● *solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why*<br><br>**Measurement**<br>● *estimate, compare and calculate different measures, including money in pounds and pence*<br><br>**Statistics**<br>● *interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.*<br>**Success criteria**<br>**Pupils can solve addition and subtraction problems in different contexts, appropriately choosing and using number facts, understanding of place value and counting and mental and written methods. They can explain their decision making and justify their solutions.**<br><br>**Fractions (including decimals)**<br>● count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten<br>● recognise and show, using diagrams, families of common equivalent fractions<br>● add and subtract fractions with the same denominator<br>● recognise and write decimal equivalents of any number of tenths or hundredths<br>● recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ | **Number and place value**<br>● *count in multiples of 6, 7, 9, 25 and 1000*<br><br>**Multiplication and division**<br>● *recall multiplication and division facts for multiplication tables up to 12 × 12*<br>● *use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers*<br>● *recognise and use factor pairs and commutativity in mental calculations*<br>● *solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling and harder correspondence problems such as* n *objects are connected to* m *objects*<br><br>**Fractions (including decimals)**<br>● solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number<br><br>**Measurement**<br>● solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.<br><br>**Success criteria**<br>**Pupils can explain the relationship between multiplication, division and fractions. They use this understanding to derive facts and solve problems.**<br><br>**Geometry: properties of shapes** |

# St Edward's Maths Curriculum Map

## Year 4 - Maths

- find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- round decimals with one decimal place to the nearest whole number
- compare numbers with the same number of decimal places up to two decimal places

**Measurement**

convert between different units of measure [for example, kilometre to metre].

**Success criteria**

**Pupils can represent and explain the multiplicative nature of the number system including how it extends into decimal numbers, as whole numbers are divided by 10 or 100 and connect this understanding to units of measure. Pupils can represent and explain the relationship between decimals and fractions. They use this understanding to solve problems.**

- *compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes*

**Geometry: position and direction**

- describe positions on a 2-D grid as coordinates in the first quadrant
- describe movements between positions as translations of a given unit to the left / right and up / down
- plot specified points and draw sides to complete a given polygon.

**Success criteria**

**Pupils can explain how to locate points on a grid in the first quadrant and use this knowledge and understanding to solve problems.**

**Number and place value**

- *count in multiples of 1000*
- *find 1000 more or less than a given number*
- *count backwards through zero to include negative numbers*
- *recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)*
- *order and compare numbers beyond 1000*
- *identify, represent and estimate numbers using different representations*
- *round any number to the nearest 10, 100 or 1000*
- *solve number and practical problems that involve all of the above and with increasingly large positive numbers*

**Measurement**

- *convert between different units of measure [for example, hour to minute]*
- read, write and convert time between analogue and digital 12- and 24-hour clocks
- *solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days*

**Statistics**

- *solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.*

# St Edward's Maths Curriculum Map

## Year 4 - Maths

| | |
|---|---|
| | **Success criteria**<br>**Pupils can make appropriate decisions about when to use their understanding of counting (including counting below zero), place value and rounding for solving problems including adding and subtracting. They can explain how to tell the time in both 12- and 24-hour clocks and can solve problems using their understanding of how to convert between different units of time.** |

# St Edward's Maths Curriculum Map

## Year 4 - Maths

| Summer 1 | Summer 2 |
|---|---|
| **Addition and subtraction**<br>● *add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate*<br>● *estimate and use inverse operations to check answers to a calculation*<br>● *solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why*<br><br>**Statistics**<br>● *interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs*<br>● *solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs*<br><br>**Fractions (including decimals)**<br>● solve simple measure and money problems involving fractions and decimals to two decimal places<br><br>**Measurement**<br>● *estimate, compare and calculate different measures, including money in pounds and pence*<br>**<u>Success criteria</u>**<br>**Pupils can solve addition and subtraction problems in different contexts, appropriately choosing and using number facts, understanding of place value and counting and mental and written methods. They explain their decision making and justify their solutions.**<br><br>**Fractions (including decimals)**<br>● *count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten*<br>● *recognise and show, using diagrams, families of* | **Number and place value**<br>● *count in multiples of 6, 7, 9, 25 and 1000*<br><br>**Multiplication and division**<br>● *recall multiplication and division facts for multiplication tables up to 12 × 12*<br>● *use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers*<br>● *recognise and use factor pairs and commutativity in mental calculations*<br>● multiply two-digit and three-digit numbers by a one-digit number using formal written layout<br>● *solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling and harder correspondence problems such as* n *objects are connected to* m *objects.*<br><br>**Fractions (including decimals)**<br>● *solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number*<br><br>**Measurement**<br>*solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days*<br>**<u>Success criteria</u>**<br>**Pupils can solve problems involving multiplication, division and fractions in different contexts, appropriately choosing and using number facts, understanding of place value and counting and mental and written methods, explain their decision making and justify their solutions.** |

# St Edward's Maths Curriculum Map

## Year 4 - Maths

*common equivalent fractions*
- *add and subtract fractions with the same denominator*
- *recognise and write decimal equivalents of any number of tenths or hundredths*
- *recognise and write decimal equivalents to ¼, ½, ¾.*
- *find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths*
- *round decimals with one decimal place to the nearest whole number*
- *compare numbers with the same number of decimal places up to two decimal places*

**Measurement**
- *convert between different units of measure [for example, kilometre to metre).*

**Success criteria**

**Pupils can represent and explain how the multiplicative nature of the number system extends into decimal numbers, as whole numbers are divided by 10 or 100, and connect this understanding to units of measure. Pupils can represent and explain the relationship between decimals and fractions. They use this understanding to solve problems.**

**Geometry: properties of shapes**
- *compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes*
- *identify acute and obtuse angles and compare and order angles up to two right angles by size*
- *identify lines of symmetry in 2-D shapes presented in different orientations*
- complete a simple symmetric figure with respect to a specific line of symmetry

**Measurement**
- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

find the area of rectilinear shapes by counting squares.

**Success criteria**

**Pupils can explain how to find the perimeter and area of a shape and how to complete a symmetrical shape with a given line of symmetry, using this knowledge and understanding to solve problems.**