St Edward's Maths Curriculum Map

Year 3 - Maths

Autumn 1	Autumn 2

Number and place value
● count from 0 in multiples of 100; find 10 or 100 more or less than a given number
● recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
● compare and order numbers up to 1000
● identify, represent and estimate numbers using different representations
● read and write numbers up to 1000 in numerals and in words
● solve number problems and practical problems involving these ideas
<u>Success criteria</u>
Pupils can explain and show how and when their counting is useful for adding and subtracting. They can make appropriate decisions about when to use their understanding of place value for solving problems, including adding and subtracting.
 	
Addition and subtraction
● add and subtract numbers mentally, including:
  – a three-digit number and ones
  – a three-digit number and tens
  – a three-digit number and hundreds
● add and subtract numbers with up to three digits
● estimate the answer to a calculation and use inverse operations to check answers
● solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
 	
Measurement
● measure, compare, add and subtract: lengths (m / cm / mm); mass (kg / g); volume / capacity (l / ml)
● add and subtract amounts of money to give change, using both £ and p in practical contexts
 	
Statistics
● interpret and present data using bar charts, pictograms and tables
● solve one-step and two-step questions [for example,
	Number and place value
	● *count from 0 in multiples of 4, 8, 50 and 100*
	
	Multiplication and division
	● recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
	● write and calculate mathematical statements for multiplication and division using the multiplication tables that they know
	● solve problems, including missing number problems, involving multiplication and division including positive integer scaling problems and correspondence problems in which *n* objects are connected to *m* objects.
	Success criteria
	Pupils can explain and represent multiplication as both repeated addition and scaling and division as both sharing and grouping. They use this understanding to derive facts and solve problems.
	Geometry: properties of shapes
	● draw 2-D shapes, and make 3-D shapes using modeling materials; 3-D shapes in different orientations and describe them
	
	Geometry: position and direction
	● recognise that angles are a property of shape or a description of a turn
	● identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
	<u>Success criteria</u>
	Pupils can explain and show angle as a measure of turn and can draw, make and identify shapes with right-angles.
	Number and place value
	● *count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number*
	● *recognise the place value of each digit in a three-digit number (hundreds, tens, ones)*
	● *compare and order numbers up to 1000*

'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

Success criteria
Pupils can solve addition and subtraction problems in different contexts, appropriately choosing and using number facts, understanding of place value and counting. They explain their decision making and justify their solutions.

- *identify, represent and estimate numbers using different representations*
- *read and write numbers up to 1000 in numerals and in words*
- *solve number problems and practical problems involving these ideas*

Measurement
- tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks
- *measure, compare, add and subtract: lengths (m / cm / mm); mass (kg / g); volume / capacity (l / ml)*

Fractions
- count up and down in tenths, recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.

Success criteria
Pupils can explain and show how and when their counting is useful for adding and subtracting and make appropriate decisions about when to use their understanding of place value for solving problems including adding and subtracting.

Spring 1	Spring 2

Addition and subtraction
● *add and subtract numbers mentally, including:*
  – *a three-digit number and ones*
  – *a three-digit number and tens*
  – *a three-digit number and hundreds*
● *add and subtract numbers with up to three digits*
● *estimate the answer to a calculation and use inverse operations to check answers*
● *solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction*
 	
Measurement
● *measure, compare, add and subtract: lengths (m / cm / mm); mass (kg / g); volume / capacity (l / ml)*
● *add and subtract amounts of money to give change, using both £ and p in practical contexts*
 	
Statistics
● *interpret and present data using bar charts, pictograms and tables*
● *solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.*
Success criteria
Pupils can solve addition and subtraction problems in different contexts (including extracting the necessary information from graphs, charts and tables), appropriately choosing and using number facts, understanding of place value and counting. They can explain their decision making and justify their solutions.
	Number and place value
	● *count from 0 in multiples of 4, 8, 50 and 100*
	
	Multiplication and division
	● *recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables*
	● *write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers*
	● *solve problems, including missing number problems, involving multiplication and division including positive integer scaling problems and correspondence problems in which n objects are connected to m objects*
	
	Fractions
	● *count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10*
	● *recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators*
	● solve problems that involve all of the above.
	Success criteria
	Pupils can explain and represent multiplication as both repeated addition and scaling; and division as both sharing (including finding fractions), and grouping. They use this understanding to derive facts and solve problems.
	
	Geometry: properties of shapes
	● *draw 2-D shapes, and make 3-D shapes using modeling materials; recognise 3-D shapes in different orientations and describe them*
	● *recognise that angles are a property of shape or a description of a turn*

Number and place value
- *identify, represent and estimate numbers using different representations*

Fractions
- *count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10*
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
- compare and order unit fractions and fractions with the same denominator
- solve problems that involve all of the above.

Success criteria

Pupils can represent fractions as numbers and explain and show how they know that for unit fractions, as the denominator increases, the size of the number decreases.

- *identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle*
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Success criteria

Pupils can recognise and identify horizontal and vertical lines and pairs of perpendicular and parallel lines and justify their thinking. They can identify acute, obtuse and right angles in the context of a 2-D shape and justify their thinking.

Number and place value
- *count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number*
- *recognise the place value of each digit in a three-digit number (hundreds, tens, ones)*
- *compare and order numbers up to 1000*
- *identify, represent and estimate numbers using different representations*
- *read and write numbers up to 1000 in numerals and in words*
- *solve number problems and practical problems involving these ideas*

Measurement
- *tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks*
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m. / p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events, [for example, to calculate the time taken by particular events or tasks]

Statistics
● *interpret and present data using bar charts, pictograms and tables.*
<u>**Success criteria**</u>
Pupils can explain and show how and when their counting is useful for adding and subtracting. They can explain and show how to tell the time and use knowledge of different units of time to solve problems.

St Edward's Maths Curriculum Map

Year 3 - Maths

Summer 1	Summer 2

Addition and subtraction
● *add and subtract numbers mentally, including:*
  – *a three-digit number and ones*
  – *a three-digit number and tens*
  – *a three-digit number and hundreds*
● *add and subtract numbers with up to three digits,* using formal written methods of columnar addition and subtraction
● *estimate the answer to a calculation and use inverse operations to check answers*
● *solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction*
 	
Measurement
● *measure, compare, add and subtract: lengths (m / cm / mm); mass (kg / g); volume / capacity (l / ml)*
● *add and subtract amounts of money to give change, using both £ and p in practical contexts*
● *record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m. / p.m., morning, afternoon, noon and midnight*
● *know the number of seconds in a minute and the number of days in each month, year and leap year*
● *compare durations of events, [for example, to calculate the time taken by particular events or tasks]*
 	
Statistics
● *interpret and present data using bar charts, pictograms and tables*
● *solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.*
<u>**Success criteria**</u>
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 solution.
	Number and place value
	● *count from 0 in multiples of 4, 8, 50 and 100*
	
	Multiplication and division
	● *recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables*
	● *write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers,* using mental and progressing to formal written methods
	● *solve problems, including missing number problems, involving multiplication and division; solve positive integer scaling problems and correspondence problems in which* n *objects are connected to* m *objects.*
	
	Fractions
	● *count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10*
	● *recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators*
	● *solve problems that involve all of the above.*
	
	Measurement
	● *know the number of seconds in a minute and the number of days in each month, year and leap year.*
	<u>**Success criteria**</u>
	Pupils can explain and represent multiplication as both repeated addition and scaling, and division as both sharing, (including finding fractions), and grouping. They use this understanding to derive facts and solve problems including two-digit by one-digit multiplications
	
	Geometry: properties of shape
	● *recognise that angles are a property of shape or a description of a turn*
	● *identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle*
	● *identify horizontal and vertical lines and pairs of*

'Following Christ we reach our goals'

Number and place value
- *identify, represent and estimate numbers using different representations*

Fractions
- *count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and dividing one-digit numbers or quantities by 10*
- *recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators*
- recognise and show, using diagrams, equivalent fractions with small denominators
- *add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]*
- *compare and order unit fractions and fractions with the same denominator.*
- *solve problems that involve all of the above.*

Success criteria

Pupils can represent fractions as numbers and explain and show how they know one fraction is bigger than or equivalent to another.

perpendicular and parallel lines
- measure the perimeter of simple 2-D shapes.

Success criteria

Pupils can measure the perimeter of simple 2-D shapes and describe properties of the shapes related to the angles.