



St Aidan's Catholic Primary School

Y2: Progression of Skills

Use this document as a track to ensure that all objectives are covered throughout the academic year and to gain an understanding of the progression of skills including prior and future learning.

NUMBER: Place value		
Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> To write numbers from 1 to 20 in numerals. To write numbers from 1 to 20 in words. <u>To count to 100.</u> <u>To read and write numbers to 100 in numerals.</u> To identify and represent numbers using objects and pictorial representations, including the number line. To represent numbers using objects and pictorial representations, including the number line. <u>To count to 100 forwards, beginning with 0 or 1, or from any given number.</u> <u>To count across 100 forwards beginning with 0 or 1, or from any given number.</u> <u>To count across 100 backwards from any given number.</u> <u>To identify one more and one less than a given number.</u> <u>To count in multiples of twos.</u> <u>To count in multiples of fives.</u> <u>To count in multiples of tens.</u> To use the language of: equal to, more than, less than (fewer), most and least. <p style="background-color: yellow; margin-top: 10px;">Y2 Objective: Recognize the place value of each digit in a two-digit number (tens, ones)</p>	<ul style="list-style-type: none"> To read and write numbers to at least 100 in numerals and in words. To recognise the place value of each digit in a two-digit number (tens, ones). <u>To identify, represent and estimate numbers using different representations (e.g. 52 can be represented as 50 and 2, 40 and 12, 30 and 22 etc), including the number line.</u> <u>To order numbers from 0 up to 100.</u> <u>To compare numbers from 0 up to 100 using <, > and = signs.</u> <u>To count in steps of 2 from 0.</u> <u>To count in steps of 3 from 0.</u> <u>To count in steps of 5 from 0.</u> <u>To count forwards in tens from any number.</u> <u>To count backwards in tens from any number.</u> <u>To use place value and number facts to solve problems.</u> <p style="margin-top: 10px;">Consolidation and Problem Solving</p>	<ul style="list-style-type: none"> To read and write numbers up to 1000 in numerals and in words. <u>To recognise the place value of each digit in a three-digit number (hundreds, ten and ones).</u> To identify, represent and estimate numbers using different representations. To compare and order numbers up to 1000. <u>To count from 0 in multiples of 4.</u> <u>To count from 0 in multiples of 8.</u> <u>To count from 0 in multiples of 50.</u> <u>To count from 0 in multiples of 100.</u> <u>To find 10 more or less than a given number.</u> <u>To find 100 more or less than a given number.</u> <p style="margin-top: 10px;"><u>To solve number problems and practical problems involving these ideas in place value</u></p> <ul style="list-style-type: none"> <u>To solve number problems and practical problems involving all ideas in place value.</u> <p style="margin-top: 10px;">Consolidation and Problem Solving</p>

Consolidation and Problem Solving		
<p style="text-align: center;"><u>Key Vocabulary</u></p> <p>Back, backwards, compare, count in twos, count in tens, count in fives, continue, forward, forwards, greater than>, less than<, multiple of, nearest ten, number fact, numeral, one-digit number, partition, place, place value, predict, represents, rounds, sequence, stands for, ones, tens, hundreds, thousands, two-digit number, 'teens number', zero, fewer, least, count, greatest, smallest, fewest, exchange, the same number as, equal to, greater, more, larger, bigger less, fewer, smaller, biggest, smallest one more, ten more one less, ten less compare, order, size first, second, third..., odd, even</p>		

NUMBER: Addition and Subtraction

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> ● <u>To represent and use number bonds within 20.</u> ● <u>To represent and use number bonds and related subtraction facts within 20.</u> ● To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. ● To add one-digit and two-digit numbers to 20, including zero. ● To subtract one-digit and two-digit numbers to 20, including zero. ● To solve one-step problems that involve addition, using concrete objects and pictorial representations, and missing number problems such as $\square - 9 = 7$. ● To solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as $\square - 9 = 7$ 	<ul style="list-style-type: none"> ● To add numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones. ● To subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones. ● To add numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens. ● To subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens. ● To add numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers within 100. ● To subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers within 100. ● To add numbers using concrete objects, pictorial representations, and mentally, including three one-digit numbers. ● To subtract numbers using concrete objects, pictorial representations, and mentally, including three one-digit numbers. ● To show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. ● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<ul style="list-style-type: none"> ● <u>To add and subtract mentally a three digit number and ones.</u> ● <u>To add and subtract mentally a three digit number and tens.</u> ● <u>To add and subtract mentally a three digit number and hundreds.</u> ● To add numbers with up to three digits, using formal written methods of columnar addition involving the use of the inverse operation. ● To subtract numbers with up to three digits, using formal written methods of columnar subtraction involving the use of the inverse operation. ● To estimate the answer to a calculation to check answers. ● To use inverse operations to check answers. ● To solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction. ● To solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction. <p style="text-align: center;"><i>Consolidation and Problem Solving</i></p>

	<ul style="list-style-type: none"> ● <u>To recall and use addition facts to 20 fluently (and to derive and use related facts up to 100).</u> ● <u>To recall and use subtraction facts to 20 fluently (and to derive and use related facts up to 100).</u> ● <u>To solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures (EXP: 1 step problems, GDS: 2 step problems).</u> ● <u>To solve problems by applying their increasing knowledge of mental and written methods (EXP: 1 step problems, GDS: 2 step problems).</u> 	
<p style="text-align: center;"><u>Key Vocabulary</u></p> <p>Bridging ten, counting on, check, inverse operation, make, partition, partitioning, plus, tens, boundary, add, addition, addition facts, all together, associative, commutative, more, sum, total, different, exchange, minus, take away, subtract, subtraction, subtraction facts, partition, difference, more, plus make, sum, total altogether score double, near double one, two, ten, one hundred more, half, halve, equals, equal to</p>		

NUMBER: Multiplication and Division

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> To solve one-step problems involving multiplication by calculating the answer using concrete objects with the support of the teacher. To solve one-step problems involving multiplication by calculating the answer using pictorial representations with the support of the teacher. To solve one-step problems involving multiplication by calculating the answer using arrays with the support of the teacher. To solve one-step problems involving division by calculating the answer using concrete objects with the support of the teacher. To solve one-step problems involving division by calculating the answer using pictorial representations with the support of the teacher. To solve one-step problems involving division by calculating the answer using arrays with the support of the teacher. To solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. To solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. <p style="text-align: center;">Consolidation and Problem Solving</p>	<ul style="list-style-type: none"> <u>To recall and use multiplication and division facts for the 2 multiplication table, including recognising odd and even numbers.</u> <u>To recall and use multiplication and division facts for the 5 multiplication table, including recognising odd and even numbers.</u> <u>To recall and use multiplication and division facts for the 10 multiplication table, including recognising odd and even numbers.</u> To calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (x) and equals signs (=). To calculate mathematical statements for division within the multiplication tables and write them using the division (\div) and equals signs (=). To show that multiplication of two numbers can be done in any order (commutative). To show that division of one number by another cannot be done in any order (commutative). <u>To solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.</u> <u>To solve problems involving division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.</u> 	<ul style="list-style-type: none"> <u>To recall and use multiplication and division facts for the 3 times table.</u> <u>To recall and use multiplication and division facts for the 4 times table.</u> <u>To recall and use multiplication and division facts for the 8 times table.</u> <u>To write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers multiplied by one-digit numbers using mental and progressing to formal written methods.</u> To solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and corresponding problems in which n objects are connected to m objects. To solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and corresponding problems in which n objects are connected to m objects. Not N.C guidance: During Summer term (or Spring term if children are confident), children will extend their learning to include the 6 and 7 x table.

<ul style="list-style-type: none"> • Non Statutory: Through grouping and sharing small quantities, pupils begin to understand: multiplication and division.; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities. They make connections between arrays, number patterns, and counting in twos, fives and tens. 		
<p style="text-align: center;"><u>Key Vocabulary</u></p> <p>Array, column, row, groups of, multiple of, multiplied by, multiply, multiplication facts, repeated addition, times, divided, divided by, division facts, equal groups of, grouping, remainder, repeated subtraction, double, halve share, share equally, commutative law</p>		

NUMBER: Fractions Decimals Percentages

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> ● <u>To recognize, find and name a half as one of two equal parts of an object.</u> ● <u>To recognise, find and name a half as one of two equal parts of a shape.</u> ● <u>To recognise, find and name a half as one of two equal parts of a quantity.</u> ● To recognise, find and name a quarter as one of four equal parts of an object. ● To recognise, find and name a quarter as one of four equal parts of a shape. ● To recognise, find and name a quarter as one of four equal parts of a quantity. <p>Consolidation and Problem Solving</p>	<ul style="list-style-type: none"> ● <u>To recognise name and write fractions $\frac{1}{3}$ of a length, shape, set of objects or quantity.</u> ● <u>To write fractions $\frac{1}{4}$ of a length, shape, set of objects or quantity.</u> ● <u>To recognise name and write fractions $\frac{2}{4}$ of a length, shape, set of objects or quantity.</u> ● <u>To write fractions $\frac{3}{4}$ of a length, shape, set of objects or quantity.</u> ● To write simple fractions, for example, $\frac{1}{2}$ of 6=3. ● To recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. 	<ul style="list-style-type: none"> ● To recognise and use fractions as numbers: unit fractions with small denominators. ● To recognise and use fractions as numbers: non-unit fractions with small denominators. ● <u>To recognise and find fractions of a discrete set of objects; unit fraction e.g. $\frac{1}{5}$, $\frac{1}{2}$ and non-unit fractions e.g. $\frac{2}{5}$, $\frac{2}{3}$ with small denominators.</u> ● <u>To write fractions of a discrete set of objects; unit fraction e.g. $\frac{1}{5}$, $\frac{1}{2}$ and non-unit fractions e.g. $\frac{2}{5}$, $\frac{2}{3}$ with small denominators.</u> ● To order unit fractions, and fractions with the same denominators. ● To compare unit fractions, and fractions with the same denominators. ● <u>To recognise, using diagrams, equivalent fractions with small denominators.</u> ● <u>To show, using diagrams, equivalent fractions with small denominators.</u> ● To add fractions with the same denominator within one whole for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$. ● To subtract fractions with the same denominator within one whole for example, $\frac{5}{7} - \frac{1}{7} = \frac{4}{7}$. ● <u>To recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</u> ● <u>To count up and down in tenths</u> <p>To solve problems that involve all of the above.</p>

Key Vocabulary

Divide, equal parts, equivalent, four quarters
,fraction, group, group equally, one half, $\frac{1}{2}$ $\frac{1}{4}$, one
half, one quarter, one whole, part, share, share
equally, one third, two thirds, two quarters, three
quarters, two halves

MEASUREMENT

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<p>Encourage telling the time every day through prompts (What time is it now? What time is lunch?) and mental maths starters.</p> <ul style="list-style-type: none"> To sequence events in chronological order using language (for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening). To recognise and use language relating to dates, including days of the week. To recognise and use language relating to dates, including months. To recognise and use language relating to dates, including years. <u>To tell the time to the hour and half past the hour.</u> <u>To draw the hands of the hour and half past the hour on a clock face.</u> <u>To compare, describe and solve practical problems for time (for example, quicker, slower, earlier, later).</u> To measure and begin to record time (hours, minutes and seconds) To recognise and know the value of different denominations of coins. To recognise and know the value of different denominations of notes. To measure and begin to record lengths and heights. <u>To compare, describe and solve practical problems for lengths and heights (for example, longer/shorter, tall/short, double/half).</u> 	<ul style="list-style-type: none"> To choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers. To compare and order lengths and record the results using $>$, $<$, and $=$ To know the number of minutes in an hour and the number of hours in a day. To sequence intervals of time. To compare intervals of time. To tell the time to five minutes, including quarter past/to the hour. To write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. To recognise and use symbols for pounds (£) and pence (p) To combine amounts to make a particular value. To find different combinations of coins that equal the same amounts of money. <u>To solve simple problems in a practical context involving addition of money of the same unit, including giving change.</u> <u>To solve simple problems in a practical context involving subtraction of money of the same unit, including giving change.</u> 	<ul style="list-style-type: none"> <u>To tell and write the time from an analogue clock.</u> Including using Roman numerals from I to XII. <u>To write the time from an analogue clock.</u> Including using Roman numerals from I to XII. <u>To tell the time from a 12-hour clock.</u> <u>To write the time from a 12-hour clock.</u> <u>To tell the time from a 24-hour clock.</u> <u>To write the time from a 24-hour clock.</u> To estimate and read time with increasing accuracy to the nearest minute. To record and compare time in terms of seconds, minutes and hours. To use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight. To know the number of seconds in a minute and the number of days in each month, year and leap year. To compare durations of events (for example to calculate the time taken by particular events or tasks). <u>To add amounts of money to give change, using both £ and p in practical contexts.</u> <u>To subtract amounts of money to give change, using both £ and p in practical contexts.</u> <u>To measure lengths (m/cm/mm).</u> <u>To compare lengths (m/cm/mm).</u> <u>To add and subtract lengths (m/cm/mm).</u>

<ul style="list-style-type: none"> • To measure and begin to record mass and weight. • <u>To compare, describe and solve practical problems for mass/weight (for example, heavy/ light, heavier than, lighter than).</u> • To measure and begin to record capacity and volume. • <u>To compare, describe and solve practical problems for capacity and volume (for example, full/empty, more than, less than, half, half full, quarter).</u> <p>Consolidation and Problem Solving</p>	<ul style="list-style-type: none"> • To choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales. <p>To compare and order mass and record the results using > , < , and =</p> <ul style="list-style-type: none"> • To choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using vessels. • To compare and order volume/capacity and record the results using > , < , and = . • To choose and use appropriate standard units to estimate and measure temperature (°C): capacity (litres/ml) to the nearest appropriate unit, using thermometers. <p>Consolidation and Problem Solving</p>	<ul style="list-style-type: none"> • To measure the perimeter of simple 2-D shapes. • <u>To measure mass (kg/g).</u> • <u>To compare mass (kg/g).</u> • <u>To add and subtract mass (kg/g).</u> • <u>To measure volume/capacity (l /ml).</u> • <u>To compare volume/capacity (l /ml).</u> • <u>To add and subtract volume/capacity (l /ml).</u> <p>Consolidation and Problem Solving</p>
<p style="text-align: center;"><u>Key Vocabulary</u></p> <p>Size, compare measuring scale guess, estimate length, width, height, longer, shorter, taller, higher... metre (m), centimetre (cm) ruler, metre stick, tape measure weigh, weighs, balances heavy/light, heavier/lighter, kilogram (kg), half-kilogram, gram(g) balance, scales, weight capacity full, half full, empty, contains litre (l), half-litre, millilitre (ml)</p> <p>time days of the week, months of the year, seasons day, week, fortnight, month, year, weekend, morning, afternoon, evening, night, midnight, today, yesterday, tomorrow hour, minute, second o'clock, half past, quarter to, quarter past clock, watch, hands digital/analogue clock/watch</p> <p>money, coin, change, total penny, pence, pound, (£) price, cost, buy, bought, sell, sold, spend, spent, pay</p>		

GEOMETRY: Position and Direction

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> ● <u>To describe position, direction and movement including whole turns.</u> ● <u>To describe position, direction and movement including half turns.</u> ● <u>To describe position, direction and movement including quarter turns.</u> ● <u>To describe position, direction and movement including three-quarter turns.</u> 	<ul style="list-style-type: none"> ● To order and arrange combinations of mathematical objects in patterns and sequence. ● <u>To use mathematical vocabulary to describe position, direction and movement. Including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</u> <p><i>Consolidation and Problem Solving</i></p>	
<p><u>Key Vocabulary</u></p> <p>Apart, beside, between, centre, corner, edge, middle, next to, opposite, order, over, pattern, position, anti-clock wise, clock-wise, direction, half turn, journey, left, quarter turn, right, right angle, rotation, straight line, turn, whole turn</p>		

GEOMETRY: Properties of Shape

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
<ul style="list-style-type: none"> ● <u>To recognise and name common 2-D shapes (for example, rectangles including squares, circles and triangles).</u> ● <u>To recognise and name common 3-D shapes (for example, cuboids [including cubes], pyramids and spheres).</u> 	<ul style="list-style-type: none"> ● To identify the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. ● To describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. ● To identify the properties of 3-D shapes, including the number of edges, vertices and faces. ● To describe the properties of 3-D shapes, including the number of edges, vertices and faces. ● To identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]. ● <u>To compare and sort common 2-D shapes and everyday objects.</u> ● <u>To compare and sort common 3-D shapes and everyday objects.</u> <p style="text-align: center;"><i>Consolidation and Problem Solving</i></p>	<ul style="list-style-type: none"> ● To draw 2-D shapes and describe their properties. ● To make 3-D shapes using modelling materials. ● To recognise 3-D shapes in different orientations and describe them. ● To recognise angles as a property of shape. ● To recognise angles as a description of a turn. ● <u>To identify right angles.</u> ● <u>To identify whether angles are greater than or less than a right angle.</u> ● <u>To recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn.</u> ● To identify horizontal lines. ● To identify vertical lines. ● To identify pairs of perpendicular lines. ● To identify pairs of parallel lines. <p style="text-align: center;"><i>Consolidation and problem solving</i></p>
<u>Key Vocabulary</u>		
shape, pattern flat, curved, straight, round hollow, solid corner face, side, edge, end make, build, draw 3D shapes: square, cube, cuboid, pyramid, sphere, cone, cylinder 2D shapes: circle, circular, triangle, triangular, square, rectangle, rectangular, star, pentagon, hexagon, octagon, pentagon, polygon, quadrilateral		

Angle, apex, corner, curve, line, line of symmetry, side, straight, edge, face, vertex, vertices, bigger, larger, smaller symmetrical, line of symmetry fold, match mirror line, reflection repeating pattern	
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STATISTICS

Prior Learning (Year 1 National Curriculum)	Year 2 Learning (National Curriculum)	Future Learning (Y3 National Curriculum)
	<ul style="list-style-type: none"> ● To interpret simple tally charts. ● To construct simple tally charts. ● To interpret simple pictograms. ● To construct simple pictograms. ● To interpret block diagrams. ● To construct block diagrams. ● To interpret simple tables. ● To construct simple tables. ● <u>To ask and answer questions about totaling and comparing categorical data.</u> <p>To ask and answer simple questions by counting the number of objects in each category and sorting categories by amount e.g. In a Venn diagram or sorting trays.</p>	<ul style="list-style-type: none"> ● <u>To interpret data using bar charts.</u> ● <u>To present data using bar charts.</u> ● <u>To interpret data using pictograms.</u> ● <u>To present data using pictograms.</u> ● <u>To interpret data using tables.</u> ● <u>To present data using tables.</u> ● To solve one-step questions (for example, 'How many more? How many fewer?') using information presented in scaled bar charts and pictograms and tables. ● To solve two-step questions (for example, 'How many more? How many fewer?') using information presented in scaled bar charts and pictograms and tables.
<p style="text-align: center;"><u>Key Vocabulary</u></p> <p>Bar charts, pictogram, tables, axis, scale, tally, sort, vote survey, questionnaire, data, graph, block graph, Carroll diagram frequency table, tally chart, discrete data, continuous data, time graph, sum, difference, comparison, interpret, frequency tables, interpret data, present data, read data, Venn diagram label, title, most popular, most common, least popular, least common</p> <p>Block diagram, block graph, compare, count, label, list, most common, least common, most popular, least popular, pictogram, sort, set, represent, table, tally, tally chart, total</p>		

Please note ~ objectives must be revisited during mental maths, arithmetic tests to ensure revision and consolidation.