

Bryn Offa C of E Primary School
Year 2 – Autumn
Teacher Planning & Assessment Tool - Maths

Topic	Curriculum Objective
Number and place value: counting, reading and writing 2-digit numbers, place value	<ul style="list-style-type: none"> To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. To recognise the place value of each digit in a two-digit number (tens, ones). To identify, represent and estimate numbers using different representations, including the number line. To compare and order numbers from 0 up to 100; use <, > and = signs. To read and write numbers to at least 100 in numerals and in words. To use place value and number facts to solve problems.
Addition: concrete, visual and number facts	<ul style="list-style-type: none"> To solve problems with addition and subtraction: Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. To show that addition can be done in any order (commutative) and subtraction cannot. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Subtraction: concrete, visual and number facts	<ul style="list-style-type: none"> To solve problems with addition and subtraction: Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two two-digit numbers; adding three one-digit numbers. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Multiplication and division: repeated addition and repeated subtraction	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using multiplication, division and equals signs. To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Geometry: properties of 3D and 2D shape	<ul style="list-style-type: none"> To identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line. To identify and describe the properties of 3D shapes including the number of edges, vertices and faces. To identify 2D shapes on the surface of 3D shapes, for example circle on a cylinder and a triangle on a pyramid. To compare and sort common 2D and 3D shapes and everyday objects.
Measures: length, mass, capacity, money	<ul style="list-style-type: none"> To choose and use appropriate standard units to estimate and measure length/ height in any direction; mass; temperature; volume and capacity to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. To compare and order lengths, mass, volume/capacity and record the results using >, < and =. To recognise and use the symbols for pounds and pence; combine amounts to make a particular value To find different combinations of coins that equal the same amounts of money To solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
Number and place value: comparing, ordering two-digit numbers and knowing their place value	<ul style="list-style-type: none"> To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. To recognise the place value of each digit in a two-digit number (tens, ones). To identify, represent and estimate numbers using different representations, including the number line. To compare and order numbers from 0 up to 100; use <, > and = signs. To read and write numbers to at least 100 in numerals and in words. To use place value and number facts to solve problems.
Addition and subtraction: using recall of addition and subtraction facts and mental calculation strategies	<ul style="list-style-type: none"> To solve problems with addition and subtraction: Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. To solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> To recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4. To write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of two quarters and one half.
Geometry: position, direction, motion Measures: time	<ul style="list-style-type: none"> To order and arrange combinations of mathematical objects in patterns. To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise) and movement in a straight line. To tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
Data: solving problems that involve collecting data in tallies, tables and pictograms	<ul style="list-style-type: none"> To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. To ask and answer simple questions by counting the number of object in each category and sorting the categories by quantity. To ask and answer questions about totalling and compare categorical data.

Year 2 – Spring

Topic	Curriculum Objective
Number and place value: estimating, counting and comparing quantities	<ul style="list-style-type: none"> To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. To recognise the place value of each digit in a 2-digit number (tens, ones). To identify, represent and estimate numbers using different representations, including the number line. To compare and order numbers from 0 up to 100; use <, > and = signs. To read and write numbers to at least 100 in numerals and in words. To use place value and number facts to solve problems.
Addition and subtraction: using recall of addition and subtraction facts and mental calculation strategies	<ul style="list-style-type: none"> To solve problems with addition and subtraction: <ul style="list-style-type: none"> Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. To show that addition can be done in any order (commutative) and subtraction cannot. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Addition and subtraction: using partitioning and counting on strategies	<ul style="list-style-type: none"> To solve problems with addition and subtraction: <ul style="list-style-type: none"> Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To show that addition can be done in any order (commutative) and subtraction cannot. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs. To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Geometry: properties of 3D and 2D shape	<ul style="list-style-type: none"> To identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line. To identify and describe the properties of 3D shapes including the number of edges, vertices and faces. To identify 2D shapes on the surface of 3D shapes, for example circle on a cylinder and a triangle on a pyramid.
Measures: length, mass, capacity and money	<ul style="list-style-type: none"> To choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm/mm); mass (kg/g); temperature ($^{\circ}\text{C}$); volume and capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. To compare and order lengths, mass, volume/capacity and record the results using >, < and =.
Number and place value: estimating, counting, comparing and ordering quantities	<ul style="list-style-type: none"> To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. To recognise the place value of each digit in a 2-digit number (tens, ones). To identify, represent and estimate numbers using different representations, including the number line. To compare and order numbers from 0 up to 100; use <, > and = signs. To read and write numbers to at least 100 in numerals and in words. To use place value and number facts to solve problems.
Addition and subtraction: using mental calculation strategies	<ul style="list-style-type: none"> To solve problems with addition and subtraction: <ul style="list-style-type: none"> Using concrete objects and pictorial representations, including those involving numbers, quantities and measures Applying their increasing knowledge of mental and written methods. To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<ul style="list-style-type: none"> To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs. To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> To recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. To write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of two quarters and one half.
Geometry: position and direction Measures: time	<ul style="list-style-type: none"> To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise) and movement in a straight line. To tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
Statistics: solving problems that involve collecting data in tallies, tables and pictograms	<ul style="list-style-type: none"> To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. To ask and answer simple questions by counting the number of object in each category and sorting the categories by quantity. To ask and answer questions about totalling and compare categorical data.

Year 2 – Summer

Topic	Curriculum Objective
Number and place value: estimating, counting, comparing and ordering quantities	<ul style="list-style-type: none"> ● To recognise the place value of each digit in a 2-digit number (tens, ones). ● To identify, represent and estimate numbers using different representations, including the number line. ● To compare and order numbers from 0 up to 100; use <, > and = signs. ● To read and write numbers to at least 100 in numerals and in words.
Addition and subtraction: using mental calculation strategies	<ul style="list-style-type: none"> ● To solve problems with addition and subtraction: <ul style="list-style-type: none"> ● Using concrete objects and pictorial representations, including those involving numbers, quantities and measures ● Applying their increasing knowledge of mental and written methods. ● To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. ● To show that addition can be done in any order (commutative) and subtraction cannot. ● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Multiplication and division: repeated addition and subtraction, arrays, grouping and using times tables facts	<ul style="list-style-type: none"> ● To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. ● To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. ● To recognise and use the inverse relationship between multiplication and division in calculations. ● To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> ● To recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. ● To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half.
Geometry: properties of 3D and 2D shape	<ul style="list-style-type: none"> ● To identify and describe the properties of 2D and 3D shapes, including the number of sides, symmetry in a vertical line, edges, vertices, and faces. ● To identify 2D shapes on the surface of 3D shapes, for example circle on a cylinder and a triangle on a pyramid. ● To compare and sort common 2D and 3D shapes and everyday objects. ● To solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Measures: length, mass (weight), capacity and money	<ul style="list-style-type: none"> ● To choose and use appropriate standard units to estimate and measure length/ height in any direction; mass; temperature; volume and capacity to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. ● To compare and order lengths, mass, volume/capacity and record the results using >, < and =. ● To recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. ● To find different combinations of coins to equal the same amounts of money ● To solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
Number and place value: estimating, counting, comparing and ordering quantities	<ul style="list-style-type: none"> ● To recognise the place value of each digit in a 2-digit number (tens, ones). ● To identify, represent and estimate numbers using different representations, including the number line. ● To compare and order numbers from 0 up to 100; use <, > and = signs. ● To read and write numbers to at least 100 in numerals and in words. ● To use place value and number facts to solve problems.
Addition and subtraction: using partitioning and sequencing	<ul style="list-style-type: none"> ● To solve problems with addition and subtraction: <ul style="list-style-type: none"> ● Using concrete objects and pictorial representations, including those involving numbers, quantities and measures ● Applying their increasing knowledge of mental and written methods. ● To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2-digit number and tens; two 2-digit numbers; adding three one-digit numbers. ● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
Fractions: finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> ● To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. ● To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. ● To recognise and use the inverse relationship between multiplication and division in calculations. ● To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
Finding fractions of quantities, shapes and sets of objects	<ul style="list-style-type: none"> ● To recognise, find, name and write fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. ● To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of two quarters and one half.
Geometry: position and direction Measures: time	<ul style="list-style-type: none"> ● To order and arrange combinations of mathematical objects in patterns. ● To use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise) and movement in a straight line. ● To compare and sequence intervals of time. ● To tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
Solving problems by gathering data and representing in tallies, tables, pictograms and block diagrams	<ul style="list-style-type: none"> ● To interpret and construct simple pictograms, tally charts, block diagrams and simple tables. ● To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. ● To ask and answer questions about totalling and compare categorical data.

