



Mathematics Long Term Plan

Owl 2024-2025

Autumn

	National Curriculum Objectives	Small Steps
Number: Place Value (within 10) 5 weeks	<ul style="list-style-type: none"> Count to ten, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 10 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. 	<ul style="list-style-type: none"> Sort objects Count objects Count objects from a larger group Represent objects Recognise numbers as words Count on from any number 1 more Count backwards within 10 1 less Compare groups by matching Fewer, more, same Less than, greater than, equal to Compare numbers

	National Curriculum Objectives	Small Steps
Number: Place Value 4 weeks	<ul style="list-style-type: none"> Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two digit number (tens, ones) Identify, represent and estimate numbers using different representations including the number line. Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs. 	<ul style="list-style-type: none"> Numbers to 20 Count objects to 100 by making 10s Recognise tens and ones Use a place value chart Partition numbers to 100 Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in expanded form 10s on the number line to 100 10s and 1s on the number line to 100 Estimate numbers on a number line

		<ul style="list-style-type: none"> Order objects and numbers The number line
<p>Number: Addition and Subtraction (within 10)</p> <p>5 weeks</p>	<ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 10 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Add and subtract one digit numbers to 10, including zero. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. 	<ul style="list-style-type: none"> Introduce parts and wholes Part-whole model Write number sentences Fact families – addition facts Number bonds within 10 Systematic number bonds within 10 Number bonds to 10 Addition - add together Addition - add more Addition problems Find a part Subtraction – find a part Fact families – the eight facts Subtraction - take away/cross out (How many left?) Subtraction - take away (How many left?) Subtraction on a number line Add or subtract 1 or 2

	<ul style="list-style-type: none"> Use place value and number facts to solve problems. Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward. 	<ul style="list-style-type: none"> Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s
<p>Number: Addition and Subtraction</p> <p>5 weeks</p>	<ul style="list-style-type: none"> Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Add and subtract numbers 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. Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those 	<ul style="list-style-type: none"> Bonds to 10 Fact families – addition and subtraction bonds within 20 Related facts Bonds to 100 (tens) Add and subtract 1s Add by making 10 Add three 1-digit numbers Add to the next 10 Add across a 10 Subtract across 10 Subtract from a 10 Subtract a 1-digit number from a 2-digit number (across a 10) 10 more, 10 less Add and subtract 10s Add two 2-digit numbers (not across a ten) Add two 2-digit numbers (across a ten) Subtract two 2-digit numbers (not across a ten) Subtract two 2-digit numbers (across a ten)

Geometry: Shape 1 week	<ul style="list-style-type: none"> Recognise and name common 2-D shapes, including: (for example, rectangles (including squares), circles and triangles) Recognise and name common 3-D shapes, including: (for example, cuboids (including cubes), pyramids and spheres.) 	<ul style="list-style-type: none"> Recognise and name 3-D shapes Sort 3-D shapes Recognise and name 2-D shapes Sort 2-D shapes Patterns with 2-D and 3-D shapes
Consolidation 1 week		

	involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. <ul style="list-style-type: none"> 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"> Mixed addition and subtraction Compare number sentences Missing number problems
Geometry: Properties of Shape 3 weeks	<ul style="list-style-type: none"> Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid.] Compare and sort common 2-D and 3-D shapes and everyday objects. 	<ul style="list-style-type: none"> Recognise 2-D and 3-D shapes Count sides on 2-D shapes Count vertices on 2-D shapes Draw 2-D shapes Lines of symmetry on shapes Use lines of symmetry to complete shapes Sort 2-D shapes Count faces on 3-D shapes Count edges on 3-D shapes Count vertices on 3-D shapes Sort 3-D shapes Make patterns with 2-D and 3-D shapes

Spring

	National Curriculum Objectives	Small Steps		National Curriculum Objectives	Small Steps
<p>Number: Place Value (within 20)</p> <p>3 weeks</p>	<ul style="list-style-type: none"> Count to twenty, forwards and backwards, beginning with 0 or 1, from any given number. Count, read and write numbers to 20 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. 	<ul style="list-style-type: none"> Count within 20 Understand 10 Understand 11, 12 and 13 Understand 14, 15 and 16 Understand 17, 18 and 19 Understand 20 1 more and 1 less The number line to 20 Use a number line to 20 Estimate on a number line to 20 Compare numbers to 20 Order numbers to 20 	<p>Measurement: Money</p> <p>2 weeks</p>	<ul style="list-style-type: none"> Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. 	<ul style="list-style-type: none"> Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money Make a pound Find change Two-step problems
<p>Number: Addition and Subtraction (within 20)</p> <p>3 weeks</p>	<ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Add and subtract one-digit and two-digit numbers to 20, including zero. 	<ul style="list-style-type: none"> Add by counting on within 20 Add ones using number bonds Find and make number bonds to 20 Doubles Near doubles Subtract ones using number bonds Subtraction – counting back 	<p>Number: Multiplication and Division</p> <p>5 weeks</p>	<ul style="list-style-type: none"> Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), 	<ul style="list-style-type: none"> Recognise equal groups Make equal groups Add equal groups Introduce the multiplication symbol Multiplication sentences Use arrays Make equal groups - grouping Make equal groups - sharing The 2 times-table

	<ul style="list-style-type: none"> Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ 	<ul style="list-style-type: none"> Subtraction – finding the difference Related Facts Missing number problems
Number: Place Value (within 50) 2 weeks	<ul style="list-style-type: none"> Count to 50 forwards and backwards, beginning with 0 or 1, or from any number. Count, read and write numbers to 50 in numerals. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Count in multiples of twos, fives and tens. 	<ul style="list-style-type: none"> Count from 20 to 50 20, 30, 40, 50 Count by making groups of tens Groups of tens and ones Partition into tens and ones The number line to 50 Estimate on a number line to 50 1 more, 1 less
Measurement: Length and Height 2 weeks	<ul style="list-style-type: none"> Measure and begin to record lengths and heights. Compare, describe and solve practical problems for: lengths and heights (for example, 	<ul style="list-style-type: none"> Compare lengths and heights Measure length using objects Measure length in centimetres

	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <ul style="list-style-type: none"> division (\div) and equals ($=$) sign. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. </div> <div style="width: 30%;"> <ul style="list-style-type: none"> Divide by 2 Doubling and halving Odd and even numbers The 10 times-table Divide by 10 The 5 times-table Divide by 5 The 5 and 10 times-tables </div> </div>	
Measurement: Length and Height 2 weeks	<ul style="list-style-type: none"> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); 	<ul style="list-style-type: none"> Measure in centimetres Measure in metres Compare lengths and heights Order lengths and heights

	long/short, longer/shorter, tall/short, double/half)	
Measurement: Mass and Volume 2 weeks	<ul style="list-style-type: none"> • Measure and begin to record mass/weight, capacity and volume. • Compare, describe and solve practical problems for mass/weight: [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] 	<ul style="list-style-type: none"> • Heavier and lighter • Measure mass • Compare mass • Full and empty • Compare volume • Measure capacity • Compare capacity

	<p>capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <ul style="list-style-type: none"> • Compare and order lengths, mass, volume/capacity and record the results using >, < and = 	<ul style="list-style-type: none"> • Four operations with lengths and heights
Measurement: Mass, Capacity and Temperature 3 weeks	<ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels <p>Compare and order lengths, mass, volume/capacity and record the results using >, < and =</p>	<ul style="list-style-type: none"> • Compare mass • Measure in grams • Measure in kilograms • Four operations with mass • Compare volume and capacity • Measure in millilitres • Measure in litres • Four operations with volume and capacity • Temperature

Summer

	National Curriculum Objectives	Small Steps
Number: Multiplication and Division 3 weeks	<ul style="list-style-type: none"> Count in multiples of twos, fives and tens. Solve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. 	<ul style="list-style-type: none"> Count in 2s Count in 10s Count in 5s Recognise equal groups Add equal groups Make arrays Make doubles Make equal groups - grouping Make equal groups - sharing
Number: Fractions 2 weeks	<ul style="list-style-type: none"> Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. 	<ul style="list-style-type: none"> Recognise a half of an object or shape Find a half of an object or shape Recognise a half of a quantity Find a half of a quantity Recognise a quarter of an object or shape Find a quarter of an object or shape Recognise a quarter of a quantity

	National Curriculum Objectives	Small Steps
Number: Fractions 3 weeks	<ul style="list-style-type: none"> Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity. Write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. 	<ul style="list-style-type: none"> Introduction to parts and wholes Equal and unequal parts Recognise a half Find a half Recognise a quarter Find a quarter Recognise a third Find a third Find the whole Unit fractions Non-unit fractions Recognise the equivalence of a half and two quarters Recognise three-quarters Find three-quarters Count in fractions up to a whole
Measurement: Time 3 weeks	<ul style="list-style-type: none"> 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. Know the number of minutes in an hour and the number of hours in a day. Compare and sequence intervals of time. 	<ul style="list-style-type: none"> O'clock and half past Quarter past and quarter to Tell time past the hour Tell time to the hour Tell the time to 5 minutes Minutes in an hour Hours in a day

		<ul style="list-style-type: none"> Find a quarter of a quantity
Geometry: Position and Direction 1 week	<ul style="list-style-type: none"> Describe position, direction and movement, including whole, half, quarter and three quarter turns 	<ul style="list-style-type: none"> Describe turns Describe position – left and right Describe position – forwards and backwards Describe position – above and below Ordinal numbers
Number: Place Value (within 100) 2 weeks	<ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals. Given a number, identify one more and one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least 	<ul style="list-style-type: none"> Count from 50 to 100 Tens to 100 Partition into tens and ones The number line to 100 1 more, 1 less Compare numbers with the same number of tens Compare any two numbers
Measurement: Money 1 week	<ul style="list-style-type: none"> Recognise and know the value of different denominations of coins and notes. 	<ul style="list-style-type: none"> Unitising Recognise coins Recognise notes Count in coins
Measurement: Time	<ul style="list-style-type: none"> Sequence events in chronological order using language [for 	<ul style="list-style-type: none"> Before and after Days of the week Months of the year

Statistics 2 weeks	<ul style="list-style-type: none"> Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data. 	<ul style="list-style-type: none"> Make tally charts Tables Block diagrams Draw pictograms (1-1) Interpret pictograms (1-1) Draw pictograms (2, 5 and 10) Interpret pictograms (2, 5 and 10)
Position and Direction 2 weeks	<ul style="list-style-type: none"> Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a 	<ul style="list-style-type: none"> Language of position Describe movement Describe turns Describe movement and turns Shape patterns with turns

2 weeks	<p>example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.</p> <ul style="list-style-type: none"> Recognise and use language relating to dates, including days of the week, weeks, months and years. Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] Measure and begin to record time (hours, minutes, seconds) 	<ul style="list-style-type: none"> Hours, minutes and seconds Tell the time to the hour Tell the time to the half hour
Consolidation		
1 week		

	<p>turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</p> <ul style="list-style-type: none"> Order and arrange combinations of mathematical objects in patterns and sequences 	
Consolidation		
2 weeks		