



Mathematics Long Term Plan

Greenfinch 2023-2024

Autumn

	Small Steps
Getting to know you 2 weeks	
Match, sort and compare 2 weeks	<ul style="list-style-type: none"> • Match objects • Match pictures and objects • Identify a set • Sort objects to a type • Explore sorting techniques • Create sorting rules • Compare amounts

	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 • Order objects and numbers • The number line

<p>Talk about measure and patterns</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Compare size • Compare mass • Compare capacity • Explore simple patterns • Copy and continue simple patterns • Create simple patterns
<p>It's me 1, 2, 3</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Find 1, 2 and 3 • Subitise 1, 2 and 3 • Represent 1, 2 and 3 • 1 more • 1 less • Composition of 1, 2 and 3
<p>Circles and triangles</p> <p>1 week</p>	<ul style="list-style-type: none"> • Identify and name circles and triangles • Compare circles and triangles • Shapes in the environment • Describe position
<p>1, 2, 3, 4, 5</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Find 4 and 5 • Subitise 4 and 5 • Represent 4 and 5 • 1 more • 1 less • Composition of 4 and 5 • Composition of 1 - 5
<p>Shapes with 4 sides</p> <p>1 week</p>	<ul style="list-style-type: none"> • Identify and name shapes with 4 sides • Combine shapes with 4 sides • Shapes in the environment • My day and night

<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?) • Take away (How many left?) • Subtraction on a number line • Add or subtract 1 or 2
<p>Geometry: Shape</p> <p>1 week</p>	<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
<p>Consolidation</p> <p>1 week</p>		

Spring

	Small Steps
Alive in 5 2 weeks	<ul style="list-style-type: none"> • Introduce zero • Find 0 to 5 • Subitise 0 to 5 • Represent 0 to 5 • 1 more • 1 less • Composition • Conceptual subitising to 5
Mass and capacity 1 week	<ul style="list-style-type: none"> • Compare mass • Find a balance • Explore capacity • Compare capacity
Growing 6, 7, 8 2 weeks	<ul style="list-style-type: none"> • Find 6, 7, 8 • Represent 6, 7, 8 • 1 more • 1 less • Composition of 6, 7, 8 • Make pairs – odd and even • Double to 8 (find a double) • Double to 8 (make a double) • Combine 2 groups • Conceptual subitising

	National Curriculum Objectives	Small Steps
Number: Place Value (within 20) 3 weeks	<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
Number: Addition and Subtraction (within 20) 3 weeks	<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. • 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"> • 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 • Subtraction – finding the difference • Related Facts • Missing number problems •

<p>Length, height and time</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Explore length • Compare length • Explore height • Compare height • Talk about time • Order and sequence time
<p>Building 9 and 10</p> <p>3 weeks</p>	<ul style="list-style-type: none"> • Find 9 and 10 • Compare number to 10 • Represent 9 and 10 • Conceptual subitising to 10 • 1 more • 1 less • Composition to 10 • Bonds to 10 (2 parts) • Make arrangements of 10 • Bonds to 10 (3 parts) • Doubles to 10 (find a double) • Doubles to 10 (make a double) • Explore even and odd
<p>Explore 3-D shapes</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Recognise and name 3-D shapes • Find 2-D shapes with 3-D shapes

<p>Number: Place Value (within 50)</p> <p>2 weeks</p>	<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
<p>Measurement: Length and Height</p> <p>2 weeks</p>	<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, long/short, longer/shorter, tall/short, double/half) 	<ul style="list-style-type: none"> • Compare lengths and heights • Measure length using objects • Measure length in centimetres
<p>Measurement: Mass and Volume</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Measure and begin to record mass/weight, capacity and volume. • Compare, describe and solve 	<ul style="list-style-type: none"> • Heavier and lighter • Measure mass • Compare mass • Full and empty

	<ul style="list-style-type: none">• Use 3-D shapes for tasks• 3-D shapes in the environment• Identify more complex patterns• Copy and continue patterns• Patterns in the environment
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	<p>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]</p>	<ul style="list-style-type: none">• Compare volume• Measure capacity• Compare capacity
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Summer

	Small Steps
To 20 and beyond 2 weeks	<ul style="list-style-type: none"> • Build numbers beyond 10 (10 – 13) • Continue patterns beyond 10 (10 – 13) • Build numbers beyond 10 (14 – 20) • Continue patterns beyond 10 (14 – 20) • Verbal counting beyond 20 • Verbal counting patterns •
How many now? 1 week	<ul style="list-style-type: none"> • Add more • How many did I add? • Take away • How many did I take away?
Manipulate, compose and decompose 2 weeks	<ul style="list-style-type: none"> • Select shapes for a purpose • Rotate shapes • Manipulate shapes • Explain shape arrangements • Compose shapes • Decompose shapes

	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 • 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

	<ul style="list-style-type: none"> • Copy 2-D shape pictures • Find 2-D shapes within 3-D shapes
Sharing and grouping 2 weeks	<ul style="list-style-type: none"> • Explore sharing • Sharing • Explore grouping • Grouping • Even and odd sharing • Play with and build doubles
Visualise, build and map 3 weeks	<ul style="list-style-type: none"> • Identify units of repeating patterns • Create own pattern rules • Explore own pattern rules • Replicate and build scenes and constructions • Visualise from different positions • Describe positions • Give instructions to build • Explore mapping • Represent maps with models • Create own maps from familiar places • Create own maps and plans from story situations

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

<p>Make connections</p> <p>1 week</p>	<ul style="list-style-type: none"> • Deepen understanding • Patterns and relationships
<p>Consolidation</p> <p>1 week</p>	

<p>Measurement: Time</p> <p>2 weeks</p>	<ul style="list-style-type: none"> • Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. • 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"> • Before and after • Days of the week • Months of the year • Hours, minutes and seconds • Tell the time to the hour • Tell the time to the half hour
<p>Consolidation</p> <p>1 week</p>		