



Summerville Primary School

EYFS Maths Curriculum

Unlike other year groups, who follow the National Curriculum, children in Early Years settings follow the Early Years framework. At Summerville we also follow the EYFS Development Matters document, which although is non-statutory, provides excellent guidance on designing and delivering an effective early years' curriculum.

Overarching: Characteristics of Effective Teaching and Learning' (DfE 2020) in all their mathematical provision:

- playing and exploring
- active learning
- creating and thinking critically.

The EYFS Development Matters objectives which relevant links to the KS1/KS2 National Curriculum for maths are found in the Communication and Language and Mathematics areas of learning. These documents were designed to be in place from September 2021.

As Summerville we welcome the changes to the new EYFS framework and the greater clarity to counting and comparing quantities in the Numerical Patterns ELG. This is to strengthen the teaching of early numeracy so that all children, particularly those from disadvantaged backgrounds, are able to start year 1 with a strong and confident foundation in number.

To enable smooth transition and maximize learning, we also: use the WRM scheme as our planning spine, follow the mastering number R-Y2 programme and have consistency with the models, representations and images that we use. Pupils in Y1 enhance and consolidate mathematical learning with continuous provision in their first term.

Mathematical Vocabulary

Nursery

- use a wider range of vocabulary
- understand a question or instruction that has 2 parts, such as: "Get your coat and wait at the door"
- understand 'why' questions, like: "Why do you think the caterpillar got so fat?"

Reception

- learn new vocabulary
- use new vocabulary throughout the day

ELG

Communication and Language	Speaking	Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.
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Number and Place Value

Counting

Nursery

- recite numbers past 5
- say one number for each item in order: 1,2,3,4,5
- know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle')

Reception

- Count objects, actions and sounds.
- Count beyond ten.

ELG

Mathematics	Numerical Patterns	Verbally count beyond 20, recognising the pattern of the counting system
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Identifying, Representing and Estimating Numbers

Nursery

- Develop fast recognition of up to 3 objects, without having to count them individually ('subitising')
- Show 'finger numbers' up to 5.

Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.

- Experiment with their own symbols and marks as well as numerals.

Reception

- Subitise.
- Link the number symbol (numeral) with its cardinal number value.

ELG

Mathematics	Number	Subitise (recognising quantities without counting) up to 5.
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Reading and Writing Numbers

Nursery

- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals. Reception Mathematics

Reception

- Link the number symbol (numeral) with its cardinal number value

Compare and Order Numbers

Nursery

- Compare quantities using language: 'more than', 'fewer than'

Reception

- Compare numbers

ELG

Mathematics	Numerical Patterns	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
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Understanding Place Value

Reception

- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.

ELG

Mathematics	Number	Have a deep understanding of numbers to 10, including the composition of each number
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Solve Problems

Nursery

- Solve real world mathematical problems with numbers up to 5

Addition and Subtraction

Mental Calculations

Reception

- Automatically recall number bonds for numbers 0-5 and some to 10

ELG

Mathematics	Number	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts
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Solve Problems

ELG

Mathematics	Number Patterns	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally
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Measurement

Describe, Measure, Compare and Solve

Nursery

- Make comparisons between objects relating to size, length, weight and capacity.

Reception

- Compare length, weight and capacity

Telling the Time

Nursery

- Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'

Properties of Shapes

Recognise 2D shapes and their Properties

Nursery

- Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'.
- Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc.
- Combine shapes to make new ones – an arch, a bigger triangle, etc

Reception

- Select, rotate and manipulate shapes in order to develop spatial reasoning skills

Compare and Classify Shapes

Reception

- Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.

Position and Direction

Position, Direction and Movement

Nursery

- Understand position through words alone – for example, "The bag is under the table," – with no pointing.
- Describe a familiar route.
- Discuss routes and locations, using words like 'in front of' and 'behind'

Reception

- Draw information from a simple map.

Patterns

Nursery

- Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc.
- Extend and create ABAB patterns – stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.

Reception

- Continue, copy and create repeating patterns.

In order to create a smooth transition between our Early Years and Key Stage 1, we have linked the Framework and National Curriculum subjects so that it is clear to see how we build upon the firm foundations built in our EYFS unit. In the table below, examples are given of EYFS activities under the Development Matters objectives and how they link to the KS1/KS2 National Curriculum maths objectives.

Across the academic year		Reception	Y1
Mathematics Number Number Patterns	<u>Outdoor Environment</u> Large scale 5 frames, 10 frames Natural resources for counting Bundles of sticks in tens Numbered natural resources for ordering numbers and labelling quantities Exploring measurement Using balance scales Digit cards Dice Number tracks Labelled measuring containers for exploring capacity with sand and water Weighing scales and recipes in texture kitchen Large and small scale 3D shapes for construction Games and scoring Sorting hoops Exploring length and height with non-standard measures	<u>Addition and Subtraction</u>	
		Number bonds	
			<ul style="list-style-type: none"> represent and use number bonds and related subtraction facts within 20
		Mental calculation	
		<ul style="list-style-type: none"> Subitise. Link the number symbol (numeral) with its cardinal number value. ELG Subitise (recognising quantities without counting) up to 5.	<ul style="list-style-type: none"> add and subtract one-digit and two-digit numbers to 20, including zero read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
		Written methods	
		<ul style="list-style-type: none"> Link the number symbol (numeral) with its cardinal number value ELG Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally	<ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
		Problem solving	
ELG Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally ELG Verbally count beyond 20, recognising the pattern of the counting system	<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 $7 = ? - 9$ 		

Timers for challenges
Pegging numberlines

Indoor environment

Maths areas with high interest
natural resources
Numicon
Multilink
Subitising
Sorting, matching
Identifying similarities and
differences
Board and dice games
Resources for counting rhymes
and songs
smaller scale 5 frames,10
frames
Themed resources for counting
Bundles of sticks in tens
Numbered natural resources for
ordering and labelling
quantities
Exploring measurement
Using balance scales
Digit cards
Dice
Number tracks
Subitising cards
Labelled measuring containers
for exploring capacity with
water
Sensory numbers for water

Weighing scales and recipes in

Algebra

Equations

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|---|---|
| <ul style="list-style-type: none"> Continue, copy and create repeating patterns. | <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 $7 = * - 9$ (copied from Addition and Subtraction) represent and use number bonds and related subtraction facts within 20 (copied from Addition and Subtraction) |
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Sequences

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| <ul style="list-style-type: none"> Continue, copy and create repeating patterns. <p>ELG
Verbally count beyond 20, recognising the pattern of the counting system</p> | <ul style="list-style-type: none"> sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening (copied from Measurement) |
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Fractions (including decimals and percentages)

Recognising fractions

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| <p>ELG
Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</p> | <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 |
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<p>kitchen roleplay area</p> <p>Large and small scale 3D shapes for construction</p> <p>Games and scoring Sorting hoops</p> <p>Exploring length and height with non-standard measures</p> <p>Timers for challenges</p> <p>Pegging numberlines</p>	<u>Geometry: position and direction</u>	
	Position, direction and movement	
	<ul style="list-style-type: none"> • Draw information from a simple map. 	<ul style="list-style-type: none"> • describe position, direction and movement, including half, quarter and three-quarter turns.
	<u>Geometry: properties of shapes</u>	
	Identifying shapes and their properties	
	<ul style="list-style-type: none"> • Select, rotate and manipulate shapes in order to develop spatial reasoning skills • Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can. 	<ul style="list-style-type: none"> • recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [e.g. rectangles (including squares), circles and triangles] • 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].
	<u>Place value</u>	
	Counting	
	<ul style="list-style-type: none"> • Count objects, actions and sounds. • Count beyond ten. • Compare numbers <p>ELG Verbally count beyond 20, recognising the pattern of the counting system</p>	<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; count in multiples of twos, fives and tens • given a number, identify one more and one less
	Comparing numbers	
<ul style="list-style-type: none"> • Compare numbers <p>ELG Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less</p>	<ul style="list-style-type: none"> • use the language of: equal to, more than, less than (fewer), most, least 	

	than or the same as the other quantity.	
	Identifying, estimating and representing numbers	
	<ul style="list-style-type: none"> • Subitise. • Link the number symbol (numeral) with its cardinal number value. <p>ELG Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</p>	<ul style="list-style-type: none"> • identify and represent numbers using objects and pictorial representations including the number line
	Reading and writing numbers	
	<ul style="list-style-type: none"> • Subitise. • Link the number symbol (numeral) with its cardinal number value. 	<ul style="list-style-type: none"> • read and write numbers from 1 to 20 in numerals and words
	<u>Measurement</u>	
	Comparing and estimating	
	<ul style="list-style-type: none"> • Compare length, weight and capacity <p>ELG Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</p>	<ul style="list-style-type: none"> • compare, describe and solve practical problems for: • lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] • mass/weight [e.g. heavy/light, heavier than, lighter than] • capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] • time [e.g. quicker, slower, earlier, later] • sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]

Measuring and calculating

Avoid money. Focus on cardinality instead.

- measure and begin to record the following:
 - lengths and heights
 - mass/weight
 - capacity and volume
 - time (hours, minutes, seconds)
- recognise and know the value of different denominations of coins and notes

Telling the time

- Talk about patterns of events
- Talk about the sequence of events in stories. Use vocabulary like 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'.
- Count down to forthcoming events on the calendar in terms of number of days or sleeps.
- Refer to the days of the week, and the day before or day after, 'yesterday' and 'tomorrow'.
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times
- recognise and use language relating to dates, including days of the week, weeks, months and years

Multiplication and division

Multiplication and division facts

ELG

Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

- count in multiples of twos, fives and tens
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