

# Waterville Primary School Progression of Skills and Vocabulary in MATHS

## EYFS

### EYFS Statutory Educational Programme:

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers.

By providing frequent and varied opportunities to build and apply this understanding – such as using manipulatives, including small pebbles and tens frames for organising counting – children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, ‘have a go’, talk to adults and peers about what they notice and not be afraid to make mistakes.

### 3 and 4-year olds will be learning to:

- \*Develop fast recognition of up to 3 objects, without having to count them individually (subitising).
- \*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 tell you how many there are in total (cardinal principle).
- \*Show finger numbers up to 5.
- \*Link numerals and amounts.
- \*Experiment with their own symbols and marks as well as numerals.
- \*Solve real world mathematical problems with numbers up to 5.
- \*Compare quantities using language: ‘more than’, ‘fewer than’.
- \*Talk about and explore 2D and 3D shapes.

### Children in Reception will be learning to:

- \*Count objects, actions and sounds.
- \*Subitise.
- \*Link the number symbol (numeral) with its cardinal number value.
- \*Count beyond ten.
- \*Compare numbers.
- \*Explore the composition of numbers to 10.
- \*Automatically recall number bonds for number 0-5 and some to 10.
- \*Select, rotate and manipulate shapes to develop spatial reasoning skills
- \*Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- \*Continue, copy and create repeating patters.
- \*Compare length, weight and capacity.

## TEACH – MODEL – USE MANIPULATIVES – RECORD – INVESTIGATE – MASTER - REPEAT

## Nursery Early Learning Goals Maths Skills

Autumn	Spring	Summer
<p><b>Number</b> To say the number names in order. To subitise to 3. To know the last number reached is how many. To compare quantities, more, less, the same.</p> <p><b>Numerical Patterns &amp; Shape</b> To complete insert puzzles. To discriminate between the same and different. To make sets of objects and sort objects to a given criteria. To notice simple patterns and to continue a simple ABAB. To be familiar with patterns in routines. To talk about and explore 2D shapes.</p>	<p><b>Number</b> To recite numbers to 10. To say one number name for each item. To know the last number is ‘How many’. To begin to recognise numerals to 5 and make own symbols/numbers. To count up to 5 objects accurately.</p> <p><b>Numerical Patterns &amp; Shape</b> To learn the days of the week and words associated with time. To extend and create repeating patterns. To recognise and name 2D shapes. To combine shapes to make new ones. To make comparisons between objects.</p>	<p><b>Number</b> To recognise numerals to 10. To count up to 10 objects. To recognise the link between number of objects and numerals. To solve real world number problems to 5 or 10. To quickly subitise numbers to 5. To explore the composition of 2,3,4,5 and make marks to represent numerals.</p> <p><b>Numerical Patterns &amp; Shape</b> To begin to learn about 3D shapes. To extend and create repeating patterns. To describe a familiar route. To solve practical problems in play.</p>

### Vocabulary

See Highlighted vocabulary from Reception

<b>Reception Early Learning Goals Maths Skills</b>	<b>Autumn</b> <b>Number</b> To count objects, actions and sounds. To subitise. To link the number symbol (numeral) with its cardinal number value.  <b>Numerical Patterns</b> To select, rotate and manipulate shapes to develop spatial reasoning skills To continue, copy and create repeating patters.	<b>Spring</b> <b>Number</b> To count objects, actions and sounds. To subitise. To link the number symbol (numeral) with its cardinal number value. To count beyond ten. To compare numbers.  <b>Numerical Patterns</b> To select, rotate and manipulate shapes to develop spatial reasoning skills To continue, copy and create repeating patters. To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	<b>Summer</b> <b>Number</b> To count objects, actions and sounds. To subitise. To link the number symbol (numeral) with its cardinal number value. To count beyond ten. To compare numbers. To explore the composition of numbers to 10. To automatically recall number bonds for number 0-5 and some to 10.  <b>Numerical Patterns</b> To select, rotate and manipulate shapes to develop spatial reasoning skills To continue, copy and create repeating patters. To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. To compare length, weight and capacity.		
	<b>Vocabulary</b>				
	<b>Number and Place Value</b> Count, subitise, order/ordinal, compare, forwards, backwards, numerals, digit, one more, one less, equal to, more than, less than.	<b>Addition and Subtraction</b> Add, plus, altogether, total, take-away/minus, number bonds, part, whole, digit.	<b>Multiplication and Division</b> Double, half, twice as many, equal unequal, share, group, odd, even.	<b>Measurement</b> <b>Measure and Length</b> Measure Wide(er) Narrow Compare Longer Shorter length  <b>Height, Weight and Capacity</b> Height Longer Shorter Taller, weight Capacity Heavy Light Bigger Full Empty More Less Half full  <b>Time</b> Time Quicker Slower Earlier Later Before After First Next Today Yesterday Tomorrow Morning Afternoon Evening Day Week Hour minutes	<b>Properties of Shape</b> 2-D shapes Rectangles Square Circle Triangle Characteristics 3-D shapes Cuboids Cubes Cone Spheres Curved Straight flat