

## Brinsworth Howarth Primary School Curriculum - Mathematics – Number & Numerical Patterns - Maths overview

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Playing & Exploring - Engagement		Active Learning - Motivation			Creating & Thinking Critically - Thinking	
<ul style="list-style-type: none"> <li>Finding out &amp; exploring</li> <li>Playing with what they know</li> <li>Being willing to 'have a go'</li> </ul>		<ul style="list-style-type: none"> <li>Being involved &amp; concentrating</li> <li>Keep on trying</li> <li>Enjoying achieving what they set out to do</li> </ul>			<ul style="list-style-type: none"> <li>Having their own ideas (creative thinking)</li> <li>Making links (building theories)</li> <li>Working with ideas (critical thinking)</li> </ul>	
<p><b>ELG</b></p> <p><b>Number</b></p> <ul style="list-style-type: none"> <li>Have a deep understanding of number to 10, including the composition of each number</li> <li>Subitise (recognise quantities without counting) up to 5</li> <li>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</li> </ul> <p><b>Numerical Patterns</b></p> <ul style="list-style-type: none"> <li>Verbally count beyond 20, recognising the pattern of the counting system</li> <li>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity</li> <li>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</li> </ul>						
Focus	Place Value: Counting	Place Value: Represent	Place Value: Use & compare	Addition & Subtraction: Recall, represent, use	Addition & Subtraction: Calculations	Addition & Subtraction: Solve problems
Nursery	<ul style="list-style-type: none"> <li>May enjoy counting verbally as far as they can go</li> <li>Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5</li> <li>Uses some number names and number language within play, and may show fascination with large numbers</li> </ul>	<ul style="list-style-type: none"> <li>Begin to recognise numerals 0 to 10</li> <li>Subitises one, two and three objects (without counting)</li> <li>Links numerals with amounts up to 5</li> </ul> <p>(and beyond )</p>	<ul style="list-style-type: none"> <li>Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same!</li> </ul>	<ul style="list-style-type: none"> <li>Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle)</li> <li>Explores using a range of their own marks and signs to which they ascribe mathematical meanings</li> </ul>	<ul style="list-style-type: none"> <li>Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers</li> <li>Beginning to recognise that each counting number is one more than the one before</li> </ul>	<ul style="list-style-type: none"> <li>Beginning to use understanding of number to solve practical problems in play and meaningful activities</li> <li>Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same</li> </ul>
Reception	<ul style="list-style-type: none"> <li>Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0</li> <li>Counts out up to 10 objects from a larger group</li> </ul>	<ul style="list-style-type: none"> <li>Engages in subitising numbers to five</li> <li>Increasingly confident at putting numerals in order 0 to 10</li> <li>Matches the numeral with a group of items to show how many there are (up to 10)</li> </ul>	<ul style="list-style-type: none"> <li>Uses number names and symbols when comparing numbers, showing interest in large numbers</li> <li>Estimates numbers of objects, showing an understanding of relative size</li> </ul>	<ul style="list-style-type: none"> <li>Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and + or -</li> <li>Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects</li> <li>Uses part-part whole methods to show their mathematical thinking</li> <li>Recalls some number facts for numbers to 10 (addition / subtraction bonds, doubles, halves, odd/even)</li> </ul>	<ul style="list-style-type: none"> <li>In practical activities, adds one and subtracts one with numbers to 10</li> </ul> <p>Uses part-part whole methods to show their mathematical thinking</p>	<ul style="list-style-type: none"> <li>Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three</li> </ul>

Year 1	<ul style="list-style-type: none"> <li>Count to &amp; across 100, forwards &amp; backwards, starting from 0, or 1, or from any given number</li> <li>Count numbers to 100 in numerals; count in multiples of twos, fives &amp; tens</li> </ul>	<ul style="list-style-type: none"> <li>Identify &amp; represent numbers using objects &amp; pictorial representations</li> <li>Read &amp; write numbers to 100 in numerals</li> <li>Read &amp; write numbers from 1 to 20 in numerals &amp; words</li> </ul>	<ul style="list-style-type: none"> <li>Given a number, identify one more &amp; less</li> </ul>	<ul style="list-style-type: none"> <li>Read, write &amp; interpret mathematical statements involving addition, subtraction &amp; equals signs</li> <li>Represent &amp; use number bonds &amp; related subtraction facts within 20</li> </ul>	<ul style="list-style-type: none"> <li>Add &amp; subtract one-digit &amp; two-digit numbers to 20, including zero</li> </ul>	<ul style="list-style-type: none"> <li>Solve one-step problems that involve addition &amp; subtraction, using concrete objects &amp; pictorial representations, &amp; missing number problems</li> </ul>
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### Brinsworth Howarth Primary School Curriculum - Mathematics – Shape, Space & Measures - Maths overview

Playing & Exploring - Engagement	Active Learning - Motivation	Creating & Thinking Critically - Thinking
<ul style="list-style-type: none"> <li>Finding out &amp; exploring</li> <li>Playing with what they know</li> <li>Being willing to 'have a go'</li> </ul>	<ul style="list-style-type: none"> <li>Being involved &amp; concentrating</li> <li>Keep on trying</li> <li>Enjoying achieving what they set out to do</li> </ul>	<ul style="list-style-type: none"> <li>Having their own ideas (creative thinking)</li> <li>Making links (building theories)</li> <li>Working with ideas (critical thinking)</li> </ul>

**ELG**  
**None**

Focus	Spatial Awareness	Shape	Pattern	Measures
Nursery	<ul style="list-style-type: none"> <li>Responds to and uses language of position and direction</li> <li>Predicts, moves and rotates objects to fit the space or create the shape they would like</li> </ul>	<ul style="list-style-type: none"> <li>Chooses items based on their shape which are appropriate for the child's purpose</li> <li>Responds to both informal language and common shape names</li> <li>Shows awareness of shape similarities and differences between objects</li> <li>Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes</li> <li>Attempts to create arches and enclosures when building, using trial and improvement to select blocks</li> </ul>	<ul style="list-style-type: none"> <li>Creates their own spatial patterns showing some organisation or regularity</li> <li>Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC)</li> <li>Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next</li> </ul>	<ul style="list-style-type: none"> <li>In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items</li> <li>Recalls a sequence of events in everyday life and stories</li> </ul>
Reception	<ul style="list-style-type: none"> <li>Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints</li> <li>Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning)</li> <li>May enjoy making simple maps of familiar and imaginative environments, with landmarks</li> </ul>	<ul style="list-style-type: none"> <li>Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes</li> <li>Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes</li> <li>Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build               <ul style="list-style-type: none"> <li>Recognise name and describe a growing range of 2-d and 3-d shapes</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Spots patterns in the environment, beginning to identify the pattern "rule"</li> <li>Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat</li> </ul>	<ul style="list-style-type: none"> <li>Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy</li> <li>Becomes familiar with measuring tools in everyday experiences and play</li> <li>Is increasingly able to order and sequence events using everyday language related to time</li> <li>Beginning to experience measuring time with timers and calendars</li> </ul>
Year 1	<ul style="list-style-type: none"> <li>Describe position, direction &amp; movement including whole, half, quarter &amp; three-quarter</li> </ul>	<ul style="list-style-type: none"> <li>Recognise &amp; name common 2D shapes</li> </ul>		<ul style="list-style-type: none"> <li>Compare, describe &amp; solve practical problems involving:</li> </ul>

	turns	• Recognise & name common 3D shapes		Lengths / heights Mass / weight Capacity / volume Time • Measure & record the following: Lengths / heights Mass / weight Capacity / volume Time • Recognise & know the value of different denominations of coins & notes • Sequence events in chronological order using language • Recognise & use language relating to dates • Tell the time to the hour & half past the hour & draw the hands on a clock face to show these times
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