

## Curriculum Statement for Mathematics



<p><b>Intent</b></p>	<p>At Brookfields Mathematics is integral to everyday life by which we can explore, investigate, understand and enjoy the world. Mathematics involves concepts of quantity, space, time, patterns, relationships, order and change. Our overarching aim is to equip pupils with the key/core knowledge, skills &amp; understanding that they can build on through their future learning. We endeavour to ensure that our pupils develop a positive and enthusiastic attitude towards mathematics that will stay with them.</p> <p>Within mathematics our pupils are encouraged to make choices, respect other's ideas, develop sharing and turn taking skills. Pupils' contributions are valued and celebrated during lessons, assemblies and within home/school books. In mathematics we focus on a very practical approach to learning, children are encouraged to take chances, try out new things and develop resilience and a 'can do' attitude to their learning.</p>
<p><b>Implementation</b></p>	<p>The teaching and learning of knowledge is carefully planned, sequenced and delivered to allow pupils maximum opportunity to learn, consolidate and expand their understanding. Teaching is of a very high quality and is informed by rigorous assessment practices whilst maximising available resources and opportunities. Children are planned for very much on an individual basis, according to their levels of attainment and individual needs.</p> <p>Pupils follow 3 distinct pathways: -</p> <ul style="list-style-type: none"> <li>• Early Learners (EYFS)</li> <li>• Explorers (Development of prerequisite skills)</li> <li>• Adventurers (Subject Specific curriculum)</li> </ul> <p>The long-term plans (see table below) provide guidance on concept coverage; for pupils following the EYFS and the National curriculum The White Rose coverage yearly overview has been suggested (where appropriate). For pupils on the Explorers and Adventurers pathways a LT plan coverage of the different concepts has been set out; however it is important to retain flexibility and teachers are encouraged to spend more time on particular concepts if they feel it is required. We plan and teach concepts following a small steps approach, with lots of repetition to embed skills, as well as links to cross curriculum learning and learning beyond the classroom.</p> <p>The following schemes are available to support/guide teachers in their planning: -</p> <ul style="list-style-type: none"> <li>• 'White Rose Mathematics Scheme of Learning'</li> <li>• 'Numicon'</li> <li>• 'Kangaroo Mathematics'</li> <li>• 'Equals' Semi –formal schemes of work 'My thinking &amp; problem solving' and 'My Play &amp; Leisure'</li> <li>• 'Equals' Formal Mathematics Scheme of work KS1 &amp; Mathematics KS2</li> </ul> <p>Early learners will follow the Early Years foundation stage statutory framework.</p> <p>For children following the Explorer pathway pupils will work on anticipation, response, tracking, exploration, early number skills, early counting and calculation skills, pattern &amp; problem solving from Brookfield's Skills Matrix – Explorer Pathway.</p> <p>The pupils on the Adventurer pathway will follow the semi-formal to formal curriculum from the Adventurer Pathway Skills Matrix; for some it may also be relevant to follow the NC coverage.</p>

Implementation cont.	<p>Effective communication is paramount and embedded within everything the pupils are taught within mathematics. Where appropriate cross curricular links are made with other subjects and with learning opportunities outside the classroom, thereby developing mathematical understanding of concepts in everyday life. Fun maths days are planned each year. Examples of these can be found in the 'Gallery' section of our school website.</p> <p>ICT is an integral part of teaching and learning in mathematics. There are a range of internet-based programmes and iPad apps available. Whilst the use of the internet is a valuable resource which allows teachers to access information and an ever increasing variety of educational resources, the use of the internet should be in line with the schools E-safety policy (and website should always be checked before using in class).</p> <p>Mathematics resources are stored both centrally and in classrooms. Everyday basic equipment is kept in individual classrooms, whilst larger concept specific equipment is stored centrally. New resources are purchased annually according to class/pupil requirements.</p> <p>The mathematic subject leader will identify and respond to training needs and opportunities.</p>
Impact	<p>As a result of the well-considered curriculum, high quality teaching and assessment and individualised approaches pupils achieve exceptionally well. Pupils develop knowledge and skills at a level appropriate to their development alongside all of the other qualities that we strive for all children to learn whilst on their learning journey at Brookfields.</p> <p>The mathematics co-ordinator monitors teaching and learning, curriculum and skills coverage through planning and work scrutinises, learning walks and analysis of data. Findings are collated and feedback given.</p> <p>Moderation takes place internally and within cluster groups.</p> <p>Ways in which we measure impact:</p> <ul style="list-style-type: none"> <li>- Each lesson, whereby teachers use observation and formative assessment to closely monitor pupil's responses, their knowledge, skills, particular areas of interest and understanding, or to identify areas for development; then to plan subsequent lessons accordingly</li> <li>- By baselining the pupils</li> <li>- By setting individual pupil targets; progress is measured against the targets in order to monitor impact and to identify areas that may require support or further development</li> <li>- Using termly B squared assessment tools; EYFS levels, Engagement steps, Progression steps and NC steps</li> <li>- Via feedback from parents during formal parent meetings, Annual review meetings, through the home/school book or informally when see parents at school drop off/home times.</li> </ul> <p>Pupil attainment levels are passed on to the next class and data is transferred between schools in order to support smooth transitions to the next stage of education.</p>

### Long Term Plan:-

	Autumn	Spring	Summer
<b>Early Learners</b>  (For scheme of work see White Rose EY & Numicon activities)	<b>Numbers &amp; Place Value:-</b> Amounts, numbers  <b>Addition and subtraction:-</b> Sorting  <b>Numbers &amp; Place Value:-</b> Comparing quantities	<b>Addition &amp; subtraction:-</b> Number bonds  <b>Number &amp; place value:-</b> Counting; comparing  <b>Addition &amp; subtraction:-</b> Combining; number bonds	<b>Geometry:-</b> Patterns  <b>Addition &amp; subtraction:-</b> count on / count back  <b>Number &amp; place value:-</b> Counting  <b>Multiplication &amp; division:-</b> doubling,

	<b>Addition &amp; subtraction:-</b> less / more  <b>Measuring:-</b> Time – My Day	<b>Geometry:-</b> Spatial awareness, 3D shapes; 2D shapes  <b>Measuring:-</b> length, height, distance; weight; capacity	
<b>Explorers</b>  (See Brookfields Explorers Skills Progression document)	<b>Experience number</b>  <b>2D shape</b>  <b>3D shape</b>  <b>Big &amp; small</b>  <b>Full &amp; empty</b>	<b>Experience number</b>  <b>2D shape</b>  <b>3D shape</b>  <b>Long &amp; short</b>	<b>Early number</b>  <b>Calculation</b>  <b>Matching</b>  <b>Heavy &amp; light</b>
<b>Adventurers</b>  (See Brookfields Adventures Skills Progression document)	<b>Number</b>  <b>Size</b>  <b>Shape</b>  <b>Capacity</b>  <b>Time</b>	<b>Number</b>  <b>Shape</b>  <b>Pattern</b>  <b>Position</b>  <b>Length</b>	<b>Number</b>  <b>Calculation (more/less)</b>  <b>Shape (sorting)</b>  <b>Weight</b>  <b>Ordinal numbers</b>

For **Adventurers** coming to the end of the skills progression document they will need to access the National Curriculum (see below for suggested coverage):-

<b>Adventurers</b> National Curriculum 1  (See White Rose & Numicon activities)	<b>Number:-</b> Place value  <b>Number:-</b> Addition & subtraction  <b>Geometry:-</b> Shape  <b>Number:-</b> Place value	<b>Number:-</b> Addition & subtraction  <b>Number:</b> Place value; multiples  <b>Measurement:-</b> Length & height  <b>Measurement:-</b> weight & volume	<b>Number:-</b> Multiplication & division; multiples  <b>Number:-</b> fractions  <b>Geometry:-</b> Position & direction  <b>Number:-</b> Place value  <b>Measurement:-</b> Money  <b>Measurement:-</b> Time
<b>Adventurers</b> National Curriculum 2  (See White Rose & Numicon activities)	<b>Number:-</b> Place value  <b>Number:-</b> Addition & subtraction  <b>Measurement:-</b> Money  <b>Number:-</b> Multiplication & division	<b>Number:</b> Multiplication & division  <b>Statistics</b>  <b>Geometry:</b> Properties of shape  <b>Number:-</b> Fractions  <b>Measurement:-</b> Length & height	<b>Geometry:-</b> Position & direction  <b>Problem solving &amp; efficient methods</b>  <b>Measurement:-</b> Time  <b>Measurement:-</b> Mass, Capacity & Temperature  <b>Investigations</b>