

At Brookfields we believe Mathematics is integral to everyday life by which we can explore, investigate, understand and enjoy the world. Mathematics underpins how we experience the world; it involves an understanding of quantity, space, time, patterns, relationships, order and change.

Our objectives are to help every pupil to achieve their full potential in developing their knowledge, skills and understanding in mathematics, which will support their practical life skills and further learning. We endeavour to ensure that our pupils develop a positive and enthusiastic attitude towards mathematics that will stay with them.

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 correspondence. 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.

Our overarching aim is to equip pupils with the key /core knowledge that they can build on through their future learning.

Children are planned for very much on an individual basis, according to their levels of attainment and individual needs.

The knowledge and skills we want our pupils to be able to understand and demonstrate is set down in The Brookfields Skills Progression document for pupils on the **Explorers** and the **Adventurers** Pathways. For **Early Learners** (Early Years Foundation Stage) they will follow steps of learning set down in the Early Years Statutory Framework and the Development Matters Non-statutory guidance document.

There is a long term Plan which provides a structure of the aspects of maths / thinking and problem solving to be taught.

The following schemes are available to support teachers to deliver the Mathematics / Thinking and Problem Solving curriculum: -

- White Rose
- Numicon
- Equals (Semi formal scheme of work 'My Thinking & Problem Solving)
- Equals (Formal Mathematics Scheme of Work KS1 & Mathematics KS2)
- Kangaroo Maths

However, we believe these schemes should be used flexibly according to our pupil's stage of development and learning styles. Many of our pupils have a spikey profile and barriers to learning linked to their diagnosis, therefore the class teacher is best placed to plan effective, engaging and differentiated lessons by adapting the lesson schemes as appropriate.

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.

Pupils follow 3 distinct pathways: -

- Early Learners (EYFS)
- Explorers (Development of prerequisite skills)
- Adventurers (Subject Specific curriculum)

The Early Learners follow the Early Years Foundation Stage Statutory framework and teachers also refer to Development Matters (non-statutory guidance for EYFS).

For children following the **Explorer pathway** pupils will work on anticipation, response, tracking, exploration, early number skills, early counting and calculation skills & problem solving from *Brookfield's Skills Matrix – Explorer Pathway*.

The pupils on the **Adventurer pathway** will follow the semi-formal to formal curriculum from the *Adventurer Pathway Skills Matrix*; it may also be relevant to follow Development Matters guidance. For **Adventurers** coming to the end of the skills progression document they will need to access the National Curriculum.

The long-term plan provides guidance on concept coverage; however, it is important to retain flexibility and teachers are encouraged to spend more time on particular concepts if they feel it is required.

Teachers produce termly curriculum overviews which identifies medium term coverage. Schemes of work (as listed above) are available to support teacher's planning.

Short term planning identifies the lesson objectives to be taught that week, taking into consideration evaluations from previous lessons, responding to the pupil's achievements, areas of interest and areas for development. Planning is differentiated according to the pupil's levels and needs; some pupils (on the Early Learner and Explorer Pathway) will require lots of practical experiences and use of objects of reference, whilst other pupils (on the Adventurer Pathway) may be working on more abstract concepts / recall of number facts, etc). 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.

Effective communication is paramount and embedded within everything the pupils are taught within mathematics. Pupils are supported with the use of sensory experiences, tactile objects, visual symbols or photographs. Where appropriate cross curricular links are made with other subjects and with learning opportunities outside the classroom whenever possible, thereby developing mathematical understanding of concepts in everyday life. Examples of this can be found on our school website 'School Info', in the Gallery' section, under 'Maths'.

ICT is an integral part of teaching and learning in mathematics. There are a range of computer programmes on class computers and interactive white boards, as well as 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 websites should always be checked before using in class).

	<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 and School Leadership Team 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. Monitoring enables us to know how well the children are learning.</p> <p>Moderation takes place internally and within cluster groups. Moderation allows us to be secure in our assessment judgements.</p> <p>Formative assessment takes place each lesson, whereby teachers closely monitor impact, identify pupil's knowledge and understanding or areas for development and plan subsequent lessons accordingly.</p> <p>In terms of summative assessment, the school assesses progress using B squared assessment tools: - EYFS levels, Engagement steps, Progression steps and where required use Pre- Key Stage Standards as appropriate. This allows pupils to be assessed according to their individual learning pathway.</p> <p>Pupils are baselined when they start school and assessed termly each year. Targets are set and progress is measured against pupil's individual targets. Pupil progress meetings take place in order to monitor progress and identify areas that may require support or further development. Specific pupil cohorts are tracked therefore we have a clear picture of how well pupils are achieving in mathematics, including those who have specific learning needs, LAC, pupil premium and EAL. Pupil attainment levels are passed on to the next class and data, alongside detailed handover information is transferred between classes / schools in order to support smooth transitions to the next stage of education.</p>