Intent



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 overarching 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 future learning. We endeavour to ensure that our pupils develop a positive and enthusiastic attitude towards mathematics that will stay with them.

We recognise that communication skills are central to all our learning, therefore 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.

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 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 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.

The Long Term Plan sets down coverage.

Schemes of Work have been developed following the White Rose Maths Scheme, with adaptions for pupils who are following the Adventurers and Explores Pathways.

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*. For **Adventurers** coming to the end of the skills progression document they will access the National Curriculum.

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

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

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. 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.

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).
Mathematics resources are stored both centrally and in classrooms. Everyday equipment is kept in individual classrooms, whilst larger concept specific equipment is stored centrally. New resources are purchased annually according to class / pupil requirements.
The mathematic subject leader will identify and respond to training needs and opportunities.
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.
The School Leadership Team and Maths co-ordinator monitors teaching and learning, curriculum and skills coverage through planning and work scrutinises, learning walks and analysis of data. Monitoring enables us to know how well the children are learning.
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.
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.
Pupils are baselined when they start school and assessed termly each year. Pupil progress is measured in line with their individual profiles. 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.

Impact