

Maths Policy

Our Vision in Maths

Think like a Mathematician

Have a growth mindset

Efficiency and depth

Be able to reason

Learning to problem solve

Agree and challenge

Knowledge and skills

Everyone can achieve

Maths prepares children for life and The Blake School's aims for the teaching and learning of Maths are founded on a belief that all children should have equality of access to a high quality curriculum whilst following the guidance of the National Curriculum's programmes of study for Maths. It is the intention that all children's interest in Maths is developed and fostered in order that their confidence and enjoyment in the subject will increase and that they will have the necessary skills and knowledge to access the next stage of learning. Each child's learning is supported and extended, building on previous experiences and recognising individual capabilities, in order that every child can experience success and reach their full potential.

Using a range of 'teaching for depth' approaches, the aim is for children to:

- have an in-depth knowledge in Maths,
- have a secure understanding of the different areas of Maths,
- be fluent in calculation,
- explain their reasoning using mathematical vocabulary and
- problem solve.

As a school which uses the 'Every Child Counts' philosophy, the importance of children having the skills and confidence to make use of Maths tools and equipment to support their learning, and to build the development of their Maths understanding is recognised. Children of all ages are encouraged to use concrete resources (such as Numicon, number lines, number rods and place value counters) and visual representations to explore the problems they are trying to solve. The aim is to build mathematicians who can represent, understand and solve problems in a variety of ways.

It is important that children have the right skills to choose the most efficient method to solve any problem they are faced with. Children at The Blake School learn to become fluent in using both mental and written methods to solve calculations. Children are taught strategies for mental arithmetic and daily opportunities are planned for them to practise and develop their mental arithmetic skills. 'Morning Maths' is delivered from Years 2 – 6 as part of daily early morning work. Informal recordings (jottings) and Maths books and folders are used to explain and explore thinking in fluency, reasoning and problem solving.

Children use a range of visual representations, such as part-whole models ('the cherry model' and the bar model), to visualise and understand problems. This enables them to explore a range of representations and methods and allows them to embed a deeper conceptual understanding alongside their number fluency.

All classrooms have a Maths display including a regularly updated 'working wall' to show key vocabulary, models and images, questions to promote Mathematical thinking, children's achievements and KIRFS. Displays are used as an integral part of teaching and supporting children during lessons. Staff in the Early Years display children's work and resources as part of their provision.

At the heart of the school's vision is empowering children to be proficient in number. Number fluency (being able to manipulate and use numbers in different ways) is an extremely important skill for all areas of Maths. This comes from a rapid recall of times table facts up to 12x12 (aimed to be achieved by the end of Year 4) and the ability to use known facts to find answers to questions that may not yet have an answer. Guidance on KIRFS (Key Instant Recall Facts) is followed to help develop children's number facts. Once children have these skills, they can apply this to related multiplication and division facts of increasing difficulty.

At The Blake School, teaching and learning approaches focus on depth and on creating relationships and links between skills and concepts; the aim is to ensure an embedded depth of understanding prior to moving through new content.

Assessment and Target Setting

Children are actively encouraged to participate in self-assessment of their progress and are expected to self-assess against the learning focus and success criteria for each lesson. Assessment for Learning is carried out during each lesson and includes a range of strategies which enable the teacher both to assess children's understanding and inform their next steps. Marking, feedback and lesson evaluation are also used to inform future planning. On-going assessment for each child is recorded on Target Tracker using 'I can' statements linked to bands and 'Age Related Expectations'. These are updated regularly and inform termly assessments along with other teacher assessment tools.

Parents and carers are kept informed of their children's achievements and next steps through reports and parent consultation evenings. As part of the reports, teachers set individualised Maths targets for each child.

Each year, in order to track progress, children in KS2 complete a summative assessment. Years 2 and 6 monitor and assess Maths more regularly throughout the year. This information is used to help identify children who are at risk of not meeting 'Age Related Expectations' or who are not making expected progress. Statutory end of Key Stage Assessments (SATs) are undertaken by children in Years 2 and 6.

Inclusion

At The Blake School, expectations are high for all children and children are supported to access age appropriate objectives. Children who have been identified as having barriers to learning in Maths may have these specified on Pupil Profiles and I.E.P.s and will be given suitable targets to help support their progress. Appropriate support is provided with the aid of resources and activities which match the learner's needs. Teachers and/or Teaching Assistants may work closely with children in small guided groups or on a 1:1 basis, as well as ensuring that they can access whole class quality first teaching.

Early Years Foundation Stage (EYFS)

EYFS follow the curriculum guidance for Maths. They are committed to ensuring the confident development of number sense and put emphasis on 'mastery' of key early concepts. Children initially explore numbers to 20 and the development of models and images for numbers as a solid foundation for further progress.

The Role of the Subject Leaders

The Maths Subject Leaders work closely with teaching staff, teaching assistants, the SLT and Governors to plan for and sustain improvement in the teaching and learning of Maths.

The Subject Leaders will:

- use their expertise to lead staff development through INSET and staff meetings.
- take the lead in policy development and ensure progression and continuity in Maths throughout the school,
- support colleagues in their development of Maths teaching,
- monitor progress in Maths and advise the Senior Leadership Team,
- advise the SENCO and MAGT Coordinator where Maths data shows any concerns,
- take responsibility for the purchase and organisation of Maths resources and
- keep up to date with developments in Maths education and disseminate relevant information to colleagues.

This policy should be read in conjunction with the Calculation Policy and Maths Non-Negotiables.