



CHERRY TREE HILL PRIMARY SCHOOL MATHS POLICY 2025

INTENT STATEMENT

Maths is a crucial skill which is an important component of our everyday lives. As a result, mathematics is an essential aspect of our broad and balanced curriculum and lends itself well towards cross-curricular links ensuring that pupils become well-rounded learners. As a school, we understand that the key to unlocking our students' mathematical potential is through rapid recall of key facts and embedding them within real life contexts. Mistakes and misconceptions are viewed as a learning prospect, providing challenge, self-assessment and peer support opportunities.

The "Concrete, Pictorial, Abstract" approach is used to support children's deepening understanding of the various concepts taught within Maths and how they link together. This gives our pupils the opportunity to practice their mathematical talk and reasoning skills in which they can showcase their growing vocabulary. Various representations and structures are used to support children as they learn.

AIMS

In line with the Mathematics Curriculum 2014, we have adopted a Mastery Approach in Maths. The emphasis is to ensure that all children become **fluent, reason** and **explain** mathematically and can **solve problems**. We aim to ensure that our pupils gain:

- A deep and sustainable learning in mathematics which they are able to apply to a range of contexts and problems.
- An ability to build upon prior knowledge.
- An ability to reason about a concept using mathematical vocabulary.
- An ability to make connections between the different areas of mathematics.
- Good procedural and conceptual understanding.
- Fluency with number
- An ability to prove and explain their understanding

APPROACH

At Cherry Tree Hill, we use a variety of teaching and learning styles and employ strategies that cater for different types of learners: use of models and images, use of computer software, use of the outdoor environment, effective questioning, whole class interaction, children asking and answering questions, explaining their thinking and through pupil demonstration. It is important that children are allowed to explore Maths and present their findings not only in a written form but also visually and so we have adopted the CPA (Concrete-Pictorial-Abstract) approach. Teachers use this approach to model concepts using multiple representations. The CPA approach enables the children to explore and experience the physical aspects of Maths before finding a way to present their findings and understandings in a visual form and finally, relying on the abstract forms of mathematics. This ensures that procedural and conceptual understanding are usually taught simultaneously.

The large majority of pupils at Cherry Tree Hill, progress through the curriculum content at the same pace. Differentiation is achieved through: intervention at the point of need (after teaching and before completing an independent task), questioning and scaffolding and individual support. Children who grasp concepts rapidly are challenged through more demanding problems which will deepen their knowledge further (greater depth).

Regular training across the school continues to be a vital part of the development of mathematics. The Maths Leaders have been involved in training with the East Midlands West Maths Hubs.

LESSON DESIGN - CURRICULUM EYFS

Within Early Years, Maths is developed through purposeful, play based experiences and will be represented throughout the indoor and outdoor provision. Learning expectations begin with the mathematics programmes of study (from the Early Years Statutory Framework) and further developed through our Mathematics curriculum trees. Maths group times run throughout the year and gradually increase over the early years. Teachers then carry out interventions through provision to ensure that learning is embedded. As pupils progress through Nursery and Reception, children will be encouraged to record their mathematical thinking (through provision and Drawing Club) and this will increase throughout their time in their EYFS.

LESSON DESIGN - CURRICULUM YEARS 1 – 6

Daily Maths lessons are taught in KS1 and KS2 to class groups. Children are taught through a variety of concepts and procedures from the National Curriculum 2014. The teaching part of the lesson entails children being involved. This is facilitated through the use of detailed and carefully structured slides. Lessons are interactive and paired talk as well as modelling through the use of concrete materials, is strongly encouraged. Children can interact with the learning in a variety of ways. Some of these ways include: Maths Jotters, whiteboards, sugar paper, number fans etc. Children are typically taught in whole class groups and complete a task independently (unless a practical, paired or group lesson is taking place).

INTERVENTIONS

Interventions at the point of need take place frequently. These are led by the teacher during assembly time and take place between the lesson input and the independent task (where time table arrangements allow). Formative assessments during the lesson input are gathered and any pupils who have not grasped the concept or who have misconceptions, have an intervention "at the point of need" to ensure that they can complete their independent task and are ready for the next step in the learning.

In addition to this, end of unit mini quizzes are carried out and these are used to inform PiXL therapies. These support staff to ensure that children are working broadly in line with the content being taught.

PLANNING

Teachers work in year groups to design lessons, resource and deliver lessons that suit the learning styles of the children within the year group at the age related expectation. Individual, paired and group work is used across a series of lessons. Each day, children are provided with a 'Think Time' task to extend their learning once the independent task has been completed. Lesson designs demonstrate the various challenges available to children as well as the mastery task and greater depth task. Questioning using the APE approach is included on the planning. The start of each lesson is based on arithmetic. We aim to dedicated the first 6 – 7 minutes of a lessons to building the children's fluency. Each Friday, teachers plan and deliver and Arithmetic lessons.

TIMES TABLES

Children undertake weekly times tables tests which aim to improve their recall of multiplication and related division facts. Teachers follow the 'Tackling Tables' programme and 'Times Tables Rockstars' to track the children's progress. Children should also have the opportunity to practise their recall using the Tackling Tables card game. Children are expected to be able to recall their times tables to 12x12 by the end of Year 4.

CROSS-CURRICULAR LINKS

The teaching of mathematics contributes significantly to children's understanding of other curriculum areas. Links are planned and taught appropriately. There are also opportunities for cross-curricular links which provide work in other areas of the curriculum to support and reinforce children's mathematical learning.

RESOURCES

Within lessons, teachers utilise practical resources to ensure that concepts are represented to the pupils in order for them to gain depth of understanding. Children are progressively encouraged to select materials suitable for the task in which they are engaged.

Teachers have been provided with a variety of resources that can support teachers with this planning. Some of these include: Maths No Problem textbooks and workbooks and Maths HUBs Schemes of Work. Teachers are strongly encouraged to use websites such as NCETM, NRich, Maths Bot and Kangaroo Maths (alongside others) to aid their planning.

WORKING WALLS

Working walls are updated in real time. Children's work as well as concrete, visual and abstract representations can be displayed to aid children's learning.

THE MARKING OF MATHEMATICS WORK

Children's work is marked according to the school's agreed marking policy. Unless a teacher feels it is necessary to do so, there is no expectation for work to be marked with a written comment. Teachers are strongly encouraged to give verbal feedback and mark the children's work with the children present where possible.

HOMEWORK

Children are strongly encouraged to learn their times tables at home. Children are given a personal 'Tackling Tables' and 'Times Tables Rockstars' login which they can use to practice their tables through games. These are provided in their Home-School diaries for reference. As well as this, we encourage parents and children to elicit Maths opportunities from the environment around us. Weekly homework activities are given as part of our current learning.

ASSESSMENT, RECORDING AND REPORTING

Assessment takes place in line with the school's agreed assessment policy. Assessment is regarded as an integral part of learning and teaching and is a continuous process. Teachers assess knowledge and understanding daily, using the objectives in the children's books. These formative assessments are used along termly tests (PiXL) to inform teacher judgments. Assessment information is then placed onto the school tracking system – Insight.

Each half term, core group meetings are held with the senior leadership team where attainment and progress across the year groups and vulnerable groups are discussed and identified. Assessments are used to assess progress against school and national targets. National tests are used for Y2 and Y6 annually. A summary of each child's attainment and progress is reported to parents following statutory guidance through end of year reports. Information is also passed onto the next teacher.

MONITORING AND EVALUATION

Teaching staff monitor their pupils through observation, discussion, teacher assessment, marking work and testing. The teaching of mathematics is monitored through:

- scrutiny of work
- lesson observations
- planning looks
- discussion during staff meetings and INSET
- tracking children's progress on Insight
- learning walks
- child voice
- book looks

The Senior Leaders and Maths Leaders are responsible for monitoring progress in mathematics.

BRITISH VALUES

At Cherry Tree Hill, we encourage children to be independent thinkers who take responsibility for their own learning and for the learning of others. One way in which this is achieved is through collaborative learning. Children are encouraged to work in groups or pairs to solve problems, sharing their mathematical thinking and strategies as they do so.

INCLUSION

Our expectations do not limit pupil achievement. All children have equal access to the mathematics curriculum. Our school strives to meet the needs of pupils with special educational needs and with disabilities, those who are gifted and talented and those learning English as an additional language. Further guidance can be found in the school's Inclusion Policy.

SAFEGUARDING

We believe every pupil should be able to participate in school activities in a safe environment and be protected from harm. This is the responsibility of every adult employed by, or invited to deliver services at Cherry Tree Hill Primary School. Our policies are developed following the DFE guidance document 'Keeping Children Safe in Education' (Sept 2021).

We recognise that child abuse is an emotive subject and therefore it is important to understand the feelings involved and not to allow them to interfere with any judgement or action that must be taken. We understand our responsibility to safeguard and promote the welfare of all our pupils and adults by protecting them from physical, sexual or emotional abuse, neglect and bullying.

HEALTH AND SAFETY

Children are made aware of their responsibility regarding safe and sensible use of equipment. All equipment used is of a suitable nature e.g. no glass jars for capacity work. Any equipment such as compasses are stored away safely.

GOVERNING BOARD

The mathematics curriculum team encourage positive links with the Numeracy Governor to keep the governing body informed of all major issues related to mathematics in the school. Co-ordinators will deliver a presentation to governors when necessary to inform them of developments and progress within mathematics at Cherry Tree Hill Primary School.

Policy Date: 17th September 2025

Review: Annually (2026)

Minute No:

Signed Chair of Standards, Pupils and Personnel Committee1 _____