



Holbeach Primary Academy Mathematics Policy

September 2024- review September 2025

At Holbeach Primary Academy we believe that mathematics is a vital tool to be used in everyday life, critical to Science, technology and engineering and necessary for economic well-being. Therefore, our intent is to develop each child's ability to master the skills of calculating and to reason and to problem-solve, we ensure children understand the world around them, extending their cultural capital.

It is our aim to implement:

- a true enjoyment, a limitless curiosity and a deep mastery of mathematics
- a positive attitude to mathematics through high quality teaching
- an understanding of mathematics through contextual processes of enquiry and experiment
- a competence and confidence in using and applying mathematical knowledge, concepts and skills
- the ability to solve problems, to reason, to think logically and to work systematically and accurately
- an appreciation of when to draw upon an appropriate mental or formal written strategy
- a proficiency in the use of a range of visual and concrete resources to support learning
- a respect for the role and value of mathematics within the wider world
- support through mathematics across other curriculum areas within our shared vision.
- An intervention programme through bespoke pick-up and planned sessions, to impact on areas assessed as in need of further progress and/ or input.

Teaching and Learning

Through careful planning, assessment, reviews and preparation we aim to ensure that throughout the school a variety of teaching and learning styles are used. This will allow the children's knowledge, skills and understanding to develop by ensuring that across the school there are opportunities for:

Breadth of Study

- practical activities and mathematical games
- a range of tasks to challenge thinking and promote mathematical talk
- knowledge- rich experiences
- key focus on development and application of vocabulary
- fluency and knowledge across a range of problem solving styles
- individual, paired, group and whole class discussions and activities
- purposeful practice with opportunities to demonstrate mastery
- tasks that promote reasoning as well as fluency
- the use of ICT as a mathematical tool, including Times Table Rockstars and Purple Mash
- the use of a wide range of manipulatives and visual representations to introduce new concepts and demonstrate a depth of study
- opportunities to select from declarative and procedural knowledge and apply to other curriculum areas including STEM projects.

Planning and Organisation

Mathematics is a core subject in the National Curriculum and class teachers plan, deliver and assess a mathematics lesson every day. They reflect on the impact of lessons and use this knowledge to consider next steps and alternative approaches.

Long Term Planning

These lessons are informed by the National Curriculum for Key Stage 1 and 2, and by the mathematics strand of the new Early Years Foundation Stage framework. Additionally, the Ready-to-Progress criteria outlined by the DfE are a crucial tool in ensuring teaching and learning in each phase of the academy holds specific key concepts, skills and strategies as a priority.

Medium Term Planning

Holbeach Primary Academy follow progressive frameworks that have been created by SLT and curriculum leaders around the White Rose Maths Hub MTPs. All year groups from EY to Y6 use the White Rose Maths Hub scheme of work and resources to develop and support their planning and teaching. These schemes provide teachers with exemplification for maths objectives and are broken down into fluency, reasoning and problem solving, key aims of the National Curriculum. They support a mastery approach to teaching and learning and have number at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. This gives time to build reasoning and problem-solving elements into the wider curriculum.

We also follow the school Calculation Policy, alongside White Rose progression documents, to ensure a continuing development of number skills and calculation strategies.

We aim to provide parents and carers with the opportunity to work with their children by providing regular homework. This homework supports their child's learning in school.

Special Education Needs and Disabilities (SEND)

Daily mathematics lessons are inclusive of all pupils with special educational needs and disabilities. Pupils' IEPs include suitable objectives and teachers keep these in mind when planning work. These targets may be worked upon within the lesson as well as on a one-to-one basis outside the mathematics lesson and reshaped where appropriate on an on-going basis.

Inclusion and Equal Opportunities

Our curriculum starts with pupil being recognised both as an individual and a member of our academy community. All children are provided with equal access to the mathematics curriculum, irrespective of any particular circumstances such as race, background, gender and capability, including those for whom English is a second language.

Within the daily mathematics lesson teachers will not only provide activities to support children who find mathematics difficult, but also activities that provide appropriate challenges for children who are high achievers in mathematics.

The aim is to ensure that everyone makes progress and gains positively from mathematic lessons.

Lessons

In all lessons, pupils are aware of learning objectives and what success looks like. Lessons involve elements of:

- declarative, procedural and conditional mathematical knowledge
- review of current knowledge and prior experiences

- application of prior learning through spaced learning and retrieval
- instruction
- demonstration- showing, describing and modelling mathematics using appropriate resources and visual displays
- effective and varied questioning
- introduction of key vocabulary, opportunity to use in discussion and application through reasoning
- explaining and illustrating- showing excellent subject knowledge
- consolidation
- reflection and evaluation of responses- identifying misconceptions and using them as a positive step to mastery

Lessons are differentiated with fluency, reasoning and problem-solving approaches to the learning objective, using concrete, visual and abstract approaches.

Where possible, mathematic skills and knowledge are applied across the curriculum to develop application of fluency and help pupils to make deeper connections, particularly with Science and Design & Technology.

Resources

The Academy staff have developed, through training and practice, a secure knowledge of ways to support learning in mathematics through concrete and visual resources. From Early Years Foundation Stage up to Year 6 these resources have been agreed and underpin the teaching of mathematics, therefore ensuring children feel confident to draw upon them at any stage of their learning.

Marking

Regular marking allows teachers to measure the impact that lessons have in ensuring pupils make good progress. Children are encouraged to self-assess their work and given time to respond to teacher's comments. These are communicated to pupils through written and/ or verbal means and will include next steps. An opportunity to peer-mark is part of our marking policy, allowing children to deepen their mathematical knowledge.

Assessment and Reporting

Teachers will continuously assess children's performance in mathematics. We use formative assessments (questioning, marking etc.) to inform our planning and to help us adjust our daily teaching.

We make more formal assessments using published schemes, questions from Testbase and government test materials to measure progress against the key objectives over a unit of work. These assessments inform pupil tracking on *Integris*- the Academy's recording software programme.

These judgements allow teachers to focus on progress within each year group and from starting points. Across the academic year, these judgements are moderated, both during Pupil Progress Meetings with Senior Leaders and amongst staff.

By the end of Year 4, pupils will have developed knowledge and recall of multiplication facts and corresponding division facts. Their speed and accuracy is monitored and addressed throughout the year, with a formative assessment made through the national Multiplication Tables Check in the Summer term.

Teacher assessments are moderated using the national tests (SATs) in Year 6 and where appropriate Optional SATs materials in Year 2 for those predicted to meet the expected standard.

Parents are given a written summary of their children's progress on two occasions during the year. This will include the level at which the child is currently working and targets for next steps. Both teacher and parent may also meet to discuss any other concerns throughout the year.

Roles and Responsibilities

The role of the Maths Team is:

- to lead in the review of a bespoke, well-balanced mathematic curriculum
- to monitor planning, teaching and learning of mathematics throughout the academy
- to track progress in mathematics through data analysis, children's books and pupil interviews
- to administer pupil interviews to also gain an understanding of pupils' perceptions and what they value within their mathematical learning
- to help raise standards in mathematics
- to monitor and maintain high quality resources
- to observe and support colleagues in the teaching of mathematics
- to lead in the development of good practice and subject knowledge throughout the academy
- to consider the drivers that shape our curriculum to suit the needs of our pupils as individuals
- to be informed about current developments in the teaching of mathematics and to disseminate information to colleagues
- to measure the impact of teaching and learning to decide on future actions and implementations
- to monitor the impact of intervention and pick-up sessions
- to report to the Executive Principal and Governors on a regular basis