



Maths Policy



Date of acceptance by governors: 5.5.21

Scheduled review date: Spring 2024

Introduction

At Hunloke Park Primary School, we believe that all of our pupils should achieve to their full potential: academically, creatively, socially, physically and personally. We aim to create a caring, supportive, happy and secure learning environment where all the variety of successes of the children can be celebrated. Mathematics is both a key skill within school, and a life skill to be utilised throughout every person's day-to-day experiences.

Mathematics gives children a way of coming to terms with their environment. Practical tasks and real life problems can be approached from a mathematical point of view. Mathematics provides children with imaginative areas of exploration and study and gives them the materials upon which to exercise their mathematical skills. These skills are a necessary tool of everyday life. Mathematics should help children to develop an appreciation of, and enjoyment in, the subject itself; as well as a realisation of its role in other curriculum areas.

Aim(s):

We aim to develop lively, enquiring minds encouraging pupils to become self-motivated, confident and capable in order to solve problems that will become an integral part of their future.

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- can **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve** problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The EYFS Framework in relation to mathematics aims for our pupils to:

- develop and improve their skills in counting
- understand and use numbers
- calculate simple addition and subtraction problems
- describe shapes, spaces, and measures

**The purpose of mathematics in our school is to develop:**

- positive attitudes towards mathematics and awareness of the relevance of mathematics in the real world
- capability and confidence in using and applying mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately
- creativity and motivation to work both independently and in cooperation with others
- confident talking about mathematics whereby the children can discuss different strategies, share their ideas and learn from mistakes

Breadth of study

Careful planning and preparation ensures that throughout the school, children engage in:

- practical activities and games using a variety of resources
- repetition of varied fluency, problem solving and reasoning questions
- problem solving to challenge thinking
- greater depth questions to challenge
- individual, paired, group and whole class learning and discussions
- purposeful practise where time is given to apply their learning through our creative approach to teaching and learning we also seek to explore and utilise further opportunities to use and apply mathematics across all subject areas.
- Daily mental maths practise (fluent in 5)

Special educational needs & disabilities (SEND)

Daily mathematics lessons are inclusive to pupils with special educational needs and disabilities. Where required, children's IEP's incorporate suitable objectives from the National Curriculum for Mathematics or Development Matters and teachers keep these in mind when planning work. These targets may be worked upon within the lesson as well as on a 1:1 or small group basis outside the mathematics lesson.

Within the daily mathematics lesson teachers have a responsibility to not only provide scaffolded activities to support children with SEND but also activities that provide sufficient challenge for children who are high achievers. It is the teachers' responsibility to ensure that all children are challenged at a level appropriate to their ability.



Inclusion and equal opportunities

All children are provided with equal access to the mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.

Entitlement

At Hunloke Park Primary School, we teach mathematics to all children, whatever their ability or individual need. Through our mathematics teaching, we provide learning opportunities that enable all pupils to make good progress. Every child has an equal right to receive the maths curriculum in daily maths lessons of approximately one hour.

Lessons

A mathematical lesson is taught every day in class and in all lessons, learning objectives and success criteria are discussed. The emphasis in lessons is to make teaching interactive and lively, to engage all children encouraging them to talk about mathematics. Lessons involve elements of:

- Instruction – giving information and structuring it well
- Demonstrating – showing in a variety of ways (Varied Fluency), describing and modelling mathematics using appropriate resources and visual displays –
- Explaining and illustrating – giving accurate and well-paced explanations
- Questioning and discussing
- Application and Consolidation
- Reflecting and evaluating responses – identifying mistakes and using them as positive teaching points
- Summarising – reviewing mathematics that has been taught enabling children to focus on next steps

Pupils' Records of work

Children are taught a variety of methods for recording their work and are encouraged and helped to use the most effective and efficient method. Children are encouraged to use mental strategies and their own jottings – in a jotter or on whiteboards, before resorting to more formal written methods. Children's own jottings to support their learning are encouraged throughout all year groups.

Calculation Policy

The calculation policy (see calculation policy) has been updated in light of the new national curriculum programmes of study and discussion with class teachers.



Marking

Work is marked against the schools marking policy. Children are encouraged to self-mark as well as peer mark. Teachers engage in live marking with the children present and address any common misconceptions within the lesson or plan for intervention from this.

Assessment

1. Target Tracker is used in all year groups from the Early Years up to Year 6. Data is collected every half-term. Early Years Outcomes and learning objectives from the National Curriculum are highlighted based on a child: 'Working Towards', 'Mostly Achieved', 'Achieved' and 'Working at Greater Depth'.
2. Using Target Tracker, children who are significantly behind in terms of attainment and/or progress will be highlighted for staff to diminish the difference.
3. Marking – See section below
4. End of Key Stage Statutory Assessments (SATS) – These take place in Years 2 and 6 and should be analysed to inform planning.
5. Year 4 National Times table Tests – to begin 2021/2022
6. Summative assessment – at the end of every term, children will undertake End of unit/term from White Rose. Data will help to inform planning and be compared to Target Tracker data.

Displays

Each classroom / resource area should have a maths display relating to current work. The maths display should be presented to the pupils as a 'maths working wall' in classrooms from Reception to Year 6 and as a 'maths area' for children in Nursery, accessing our larger Early Years space. Displays should be accessible to both teaching staff and the pupils and should be updated regularly to reflect pace of learning. All teaching staff follow a list of 'non-negotiables' to inform them of what should be included on their 'working walls' to ensure that they are useful, purposeful and effective in promoting children's independence and progress in the subject. This list includes key vocabulary, resources and the four operations (after they are known to the children), current learning objectives (that should be updated at least weekly), examples of methods and calculations, higher order questions, challenges, examples of the children's work and interactive opportunities.

Resources

Each class uses White Rose resources for both teaching slides and independent work. Some classes use other resources alongside such as Third Space, NRich, NCETM and Primary Stars.



Each lesson involves varied fluency, problem solving and reasoning questions. Teachers use Fluent in 5 or daily 10 to develop mental math skills.

Role of the Subject Leader

- To lead the development of mathematics at Hunloke Park
- To raise standards in mathematics
- Prepares, organises and leads CPD and joint professional development
- Works collaboratively with SENCO and SLT
- To monitor and maintain high quality teaching and resources
- To keep up to date with new developments in the area of mathematics
- To keep parents informed about mathematical developments