



# Maths Mission Statement

## Intent

The language of mathematics is international. The basic skills of mathematics are vital for the life opportunities of our children. Our aim is for all children to think mathematically, enabling them to reason, solve problems and assess risk in a range of contexts.

At Ashbourne Hilltop Primary and Nursery School our mathematics curriculum has been developed to ensure that every child can achieve excellence in maths. Children experience a sense of awe and wonder as they solve a problem for the first time, discover different solutions and make links between different areas of mathematics. It provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures that pupils fully understand what they are learning.

## Key features of our Maths Mastery curriculum:

- High expectations for every child
- Number sense and place value come first
- Focus on mathematical thinking and language
- Resources to support
- Problem solving is central
- Building fluency
- Calculate with confidence- understand why it works

We aim to enable all pupils to achieve a mastery of essential knowledge and skills in mathematics. Pupils will develop a deeper understanding of maths by utilising a concrete, pictorial, abstract approach.



## Aims

- To foster positive attitudes, fascination and excitement of discovery through the teaching and learning of mathematical concepts.
- To ensure pupils become fluent in the fundamentals of mathematics, developing conceptual knowledge and an ability to recall and apply knowledge rapidly and accurately
- To ensure that pupils can reason mathematically and solve problems

- For our children to develop a ‘can do’ attitude and perceive themselves as mathematicians.
- To broaden children’s knowledge and understanding of how mathematics is used in the wider world.
- To deepen knowledge and understanding of complex mathematical concepts through effective questioning and challenge.
- For our children to use and understand mathematical language and recognise its importance as a language for communication and thinking.
- To implement the current legal requirements of the Foundation Stage (FS) and the National Curriculum (NC).

## Implementation

### Early Years Foundation Stage

In the Early Years Foundation Stage (EYFS), learning is achieved through adult supported teaching and learning. Daily opportunities to informally develop mathematical understanding through child-initiated activities and routines are capitalised upon.

### Key Stage 1 and 2

In Key Stage 1 (KS1) and 2 (KS2), teaching follows the national curriculum, using the White Rose maths hub materials. This involves a daily maths lesson, pre teaching activities (Proactive interventions), post learning activities (reactive interventions) and specific times tables sessions.

Teaching and learning in all three key stages takes place in a range of environments.

## Planning

At Ashbourne Hilltop Primary and Nursery School, we use the White Rose Mathematics Hubs resources to support us in our planning.

- Long term plans map out the units to be covered each term, during each Key Stage.
- Medium term plans identify learning objectives and outcomes for each session of a unit. These are prepared by each teacher, highlight the skills and objectives of the lesson, and identify resources and appropriate differentiation. They also indicate key questions.

## Resources

- Each class has a range of resources to support learning. These are easily accessible for the children so that they can lead their own learning.
- Classroom environment should be designed to support maths development.
- A range of ICT software and hardware to support the teaching of specific concepts including programmable robots, Purple Mash and TT Rockstars, which can be used at home.

## Times Tables Scheme

Effective understanding and recall of times tables is the foundation of most of the mathematics children will do at primary school and the mathematics curriculum involves

children being fluent in number skills. Our times tables scheme includes inverse operations, a range of representations and problem solving, which are all vital skills in mathematics.

The children in years 2 - 6 practise using Times Table Rock stars. They have access to this at home. Engagement is monitored on a weekly basis and linked to the whole school reward system.

## Assessment

In Mathematics, assessment is continuous. From the beginning of every lesson, teachers and teaching assistants will be assessing what their pupils are, or are not understanding. Interventions will be both planned for and 'live', meaning that misconceptions are dealt with immediately and high attaining pupils are challenged appropriately. Assessments and assessment tracking is used to plan both proactive and reactive interventions.

## Early Years Foundation Stage

- EYFS Class practitioner's ongoing observational assessments made early in Autumn Term 1 ascertain a baseline which then informs subsequent teaching and learning.
- Future attainment is noted using photographs, completed activities and observational notes. Progress is recorded in each child's Learning Journey and the next steps to be taken are identified. Progress is monitored termly.
- Statutory assessments are made on entry and on exit of the EYFS.

## KS1 and KS2

- In the daily mathematics lesson, formative assessments are made continuously. Practitioners observe, question and evaluate lesson outcomes to further determine progress made and the next steps in learning.
- Pre/ post assessments take place for each new unit of work. These are completed 2 weeks before a unit (Pre Learning) and at least 2 weeks after a unit (Post Learning).
- Summative assessments are made at the end of each term to monitor children's knowledge and understanding of concepts taught. White Rose Mathematics Hub tests are used in all year groups from 1 - 6.
- The information from these tests populate knitting patterns which are used by both class teachers and school leaders to highlight strengths and weaknesses of class and school provision.
- Progress is discussed at termly 'Pupil Progress Meetings' and focus children are indicated.
- 'Pupil conferencing' is used as part of the whole school monitoring process. This involves children from Year groups 1 - 6 who are interviewed during the Autumn, Spring and Summer terms by the maths subject leader.
- Statutory assessments are made at the end of each key stage.

## Impact

### Monitoring procedures

The Head teacher and maths subject leader play a central role in the monitoring and evaluation of the quality of provision and learning of mathematics in the school.

The monitoring strategy:

1. Children's work and medium term planning scrutinies are conducted.
2. Pupil progress meetings are held 3 times a year.
3. Lesson 'drop ins' and observations take place in all classes throughout the year.
4. Pupil conferencing takes place 3 times a year.

The subject leader is responsible for monitoring attainment and progress, the outcomes of which are collated in the subject leadership folder and fed back to staff at an appropriate time. Provision and learning is monitored at a time indicated in the **School Improvement Plan: Monitoring and Evaluation timetable**.