Stoke Prior Maths Policy

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject (National Curriculum, 2014).

**Intent**

We aim to provide a high-quality mathematics education so that all children:

* Have a positive attitude to mathematics and to develop a love of the subject.
* Have self confidence in their ability to deal with maths.
* Be able to work systematically, cooperatively and with perseverance.
* Be able to think logically and independently.
* Experience a sense of achievement regardless of age or ability.
* Understand the appropriate underlying skills, concepts and knowledge of number, measurement, geometry and statistics.
* Effectively use manipulatives to support thinking, learning and understanding.
* Be able to apply previously acquired concepts, skills and knowledge and understanding to new situations both in and out of school.
* Be able to communicate with peers and adults, ideas, experiences, questions, clearly and fluently, using the appropriate mathematical vocabulary.
* Be aware of the use of mathematics beyond the classroom.
* Encourage the use of mental calculations and efficient strategies to work out solutions to enable them to develop procedural fluency alongside their conceptual understanding.

For Parents to:

• Be actively involved in their children’s mathematical learning both in school and at home.

**Implementation:**

At Stoke Prior, we use Hamilton Trust planning for our mathematics teaching in KS1 and KS2. Hamilton Trust provide long-term curriculum plans split into medium-term short blocks suitable for the teaching of mixed age classes. Planning is closely linked to year group National Curriculum Outcomes and Ready to Progress criteria. Hamilton Trust planning also offers Go Deeper with Problem-solving Investigations and Extra Support Activities for all blocks of work. Skills are constantly revisited, and built upon, extending children’s skills and thinking. Planning follows Stoke Prior’s Calculation Policy which gives an overview of the development of the four operations from Reception to Year 6. Our mathematics teaching in EYFS is taught through using White Rose planning. By following these schemes, it ensures full topic coverage and progression across all year groups. Misconceptions and misunderstandings are picked up early and interventions are put in place to ensure children do not fall behind their peers.

Concrete manipulatives and pictorial representations are used across the school to support conceptual understanding and to make links across topics. We believe that developing problem solving and thinking skills is highly important and children are provided with opportunities to develop these skills in daily lessons. Daily lessons include constant reinforcements and practice of past learning in order to fully embed and deepen the understanding of mathematical concepts.

At Stoke Prior, we encourage parents to support the learning of their children. We encourage parents to attend Maths Mornings where they have the opportunity to learn mathematics alongside their child and see the subject taught in a fun and positive way. Our mathematics coordinator encourages parents to attend workshops where they can learn in a relaxed manner how mathematics, and in particular calculation skills, are taught at Stoke Prior, so that they have greater confidence to support their children at home.

Children are given the opportunity to take part in Maths Days where the whole school engage in fun mathematically-based activities in buddies to further develop a love of the subject.

**Inclusion**

We teach mathematics to all children, whatever their ability and individual needs. Through our teaching, we provide learning opportunities that enable all pupils to make excellent progress. We strive to meet the needs of those pupils with special educational needs, those with disabilities, those who are higher level thinkers, and those learning English as an additional language, and we take all reasonable steps to achieve this. We believe that the curriculum should be accessible to all children. This is made possible using strategies such as scaffolded support and small group work.

**Impact**

How we assess children in Maths:

* Daily recaps of learning using diagnostic questions.
* Regular and impactful verbal feedback during teaching time.
* End of Hamilton Trust block assessments.
* End of Key Stage assessments.
* Moderation of work with other schools in TCAT.
* End of Year Rising Star Assessments covering all topics taught throughout the year.

**Outcomes**

* Most children reach end of year expectations.
* Well planned sequences of learning support children to develop and refine their mathematic skills.
* Children can independently apply their knowledge to a range of increasingly complex problems.
* Children can reason with increased confidence and accuracy.

**Leadership/Role of the Coordinator**

Our mathematics subject leader must have a love of the subject and be an outstanding practitioner to lead by example. To tackle barriers, ensure consistency and promote achievement for all pupils, they are responsible for:

* Monitoring teaching and learning through learning walks, book trawls, planning scrutiny and discussions with children.
* Using the information gathered from data analysis to improve teaching and the curriculum.
* Robustly challenging teaching and staff confidence and identifying what support or development might be needed.
* Work with the head teacher and governing body to continue to raise standards across our school.
* Maintaining the high profile of mathematics in the School Improvement Plan.
* To update mathematics resources regularly.
* Listen to the voices of the children by encouraging them to complete a Pupil Voice questionnaire.