

# John Hampden and Tetsworth Schools' Federation

### **Maths Policy**

#### Intent Statement:

John Hampden uses 'The national curriculum in England: mathematics programmes of study: Key Stages 1 and 2' (updated 2020) and 'The early years foundation stage statutory framework' (2014) as a basis for planning and teaching and to fulfil the government's statutory requirements.

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 develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- 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 nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

As maths is all around us in our daily lives, we aim to ensure that children are aware of how to apply learning to everyday scenarios.

- We encourage the application of maths in real life contexts by incorporating cross curricular links as opportunities arise.
- The teaching of maths includes a wide range of experiences for pupils that foster logical and positive thinking, develop a knowledge of, and ability to apply functional mathematics and give children confidence and enjoyment.

#### **Implementation Statement:**

At John Hampden we use the White Rose programme of study for medium term planning alongside progression maps and the Calculation Policy. White Rose provides a structured and progressive means of enabling each child to become familiar with the appropriate key objectives for the topic headings in the national curriculum. Progression Maps for the topic headings illustrate the progression from Nursery to Year 6. The Calculation Policy provides guidance on the calculation methods taught across the school.

We aim to raise the achievement of all children by ensuring a sound understanding of key objectives by:

- using the CPA (concrete, pictorial, abstract) approach across the whole school that focuses on learning by doing,to support and deepen children's learning;
- teaching maths for mastery to help pupils develop a deep and secure knowledge and understanding of maths at each stage of their learning;
- securing the use of mathematical language by encouraging speaking and listening skills (use of STEM sentences) and providing opportunities to use the mathematical vocabulary when expressing mathematical ideas;
- reinforcing the importance of remembering key facts through times tables (Times Tables Rock Stars) and mental arithmetic tests (KS2);
- fostering and developing a range of strategies to solve real life problems;

- giving children a range of opportunities for challenge in maths enabling the development of reflection, resilience and reasoning:
- teaching children in differentiated groups (Y3 -Y6);
- providing effective differentiation of tasks and appropriate levels of support (and additional support/provision) for all abilities;
- offering the Maths For Life programme for children with additional needs which is aligned with the national curriculum and is framed in practical understanding and delivers the essential maths needed for life.

### **Monitoring:**

- Maths provision and its impact on learners is evaluated and reviewed in the Autumn, Spring and Summer terms through summative assessments using Rising Stars PUMA tests for each year group from Y1.
- The maths curriculum is monitored by the maths coordinators through learning walks/lesson observations, scrutiny of planning and children's work, staff meetings and discussions with children.
- ➤ The CPD needs of the staff, including the maths co-ordinators and teaching assistants, are regularly reviewed and planned as appropriate. Staff attending CPD are given opportunities to cascade key messages.

## **Impact Statement:**

Our pupils will have developed an enthusiasm and love for maths. Their confidence would have increased across a range of mathematical concepts and their self esteem will have improved. Our Maths For Life programme for children with additional learning needs offers essential maths needed for life.

The policy is intrinsically linked with and is informed by other school policies, including:

- Progression Maps
- Calculation Policy
- Teaching and Learning Policy
- Assessment Policy
- Early Years Policy
- Special Educational Needs Policy
- Single Equalities Policy

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