

# Maths Curriculum at Gaddesden Row School

## Intent

Mathematics is fundamental in our everyday lives, therefore at Gaddesden Row JMI we are committed to ensuring that children learn to be fluent in skills, how to reason and problem solve.

### The National Curriculum states that all children should:

- 1. 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.
- 2. Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- 3. 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. Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas.

At Gaddesden Row, children have access to a creative and ambitious mathematics curriculum that is rich in skills and knowledge. We believe all children should learn the mathematical skills and knowledge they need for their future lives. We aim for all children to be involved in a 'hands on' curriculum that is supported through our 'Concrete, pictorial and abstract' approach. This enables all children to discover maths for themselves and encourages independence due to the models and pictures the children are taught to aid their learning.

## **Mastery Approach**

Pupils are required to explore maths in depth, using mathematical vocabulary to reason and explain their answers. They are taught to explain their choice of methods and develop their mathematical reasoning skills. We explicitly teach mathematical vocabulary to ensure that all children have the ability to explain their answers articulately and reason in as much detail as possible.

# **Implementation**

Our curriculum aims to enable all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be. Maths at Gaddesden Row:

- We follow the White Rose scheme of work that focuses on fluency, reasoning and problem solving.
- A range of reasoning resources are used to challenge all children and give them the
  opportunity to reason with their understanding.
- Mathematical vocabulary is taught at the beginning of each lesson.
- Children are taught through targeted differentiated small group and mixed ability year group teaching.
- Lessons use a Concrete, Pictorial and Abstract approach to guide children through their understanding of mathematical processes.

## **Impact**

As a result of our Maths teaching at Gaddesden Row JMI you will see:

- Engaged children.
- Children that are challenged irrespective of background, ability or additional needs.
- A growing independence and confidence throughout the school.
- Lessons that use a variety of resources to support learning.
- Different representations of mathematical concepts.
- Learning that is tracked and monitored to ensure all children make good progress.