

# Maths Curriculum Statement

*“Pure mathematics is, in its way, the poetry  
of logical ideas.”*

Albert Einstein



## Intent – What we are trying to achieve?

*At Orchard, we want our Maths curriculum to build confidence, curiosity and skills, one number at a time.*

Our intent in teaching Maths is to foster a positive and engaging learning environment where every child develops a solid understanding of mathematical concepts. We aim to build foundational skills through hands-on activities and real-world applications, encouraging problem-solving, critical thinking, and a love for learning. Our approach ensures that students gain confidence in their abilities, are prepared for future mathematical challenges, and recognise the relevance of Maths in their everyday lives.

## Implementation – Generic Info

### Ambitious - Planning & Design

- Every class from EYFS to Y6 follows the our own White Rose scheme of learning which is based on the National Curriculum. Lessons may be personalised to address the individual needs and requirements for a class but coverage is maintained.
- In order to further develop the children’s fluency, reasoning and problem-solving, we use a range of planning resources including those provided by the NCETM and NRICH to enrich our children’s maths diet.
- We have revisit activities in each class whereby children are set a maths task to ensure general maths knowledge and fluency are maintained and developed.
- We incorporate sustained levels of challenge through varied and high-quality activities with a focus on fluency, reasoning and problem solving.
- Learning is broken down into small, connected steps, building from what pupils already know. The lesson journey should be detailed and evident on flipcharts (Smart Notebook or PowerPoint) and within teacher’s paper plans.
- Difficult points and potential misconceptions are identified in advance and strategies to address them planned.
- Meaningful links with other subjects are made where appropriate to ensure that the Maths curriculum is a rich base of factual knowledge and vocabulary that helps pupils to make connections within a 3D model.

### Enjoyable – Enrichment through a thematic approach

- The acquisition of knowledge in Maths is achieved through a range of high quality, engaging and hands on learning opportunities supplemented by enrichment opportunities to widen experiences to enable our pupils to reach their full potential.
- Enrichment through stimulating and ‘memorable experiences’ such as theme days, maths mornings and visits/working alongside other schools are built in to each lesson to make learning in Maths ‘enticing’ and to build confidence in using maths in everyday life.

### Relevant - Progression

- Our scheme of learning allows for units of maths learning to be built upon each other as the children move further up the school. Each unit of work is carefully mapped out into small steps.
- Connections between concepts provide the basis for progression. The curriculum framework across each phase (EYFS, Key Stage 1, Lower Key Stage 2 and Upper Key Stage 2) has been carefully

mapped to set out the necessary knowledge that will be taught, and how these essential concepts develop cumulatively throughout each unit.

- Through our teaching we continuously monitor pupils' progress against expected attainment for their age, making formative assessment notes where appropriate and using these to inform our teaching. Summative assessments are completed at the end of each half term; their results form discussions in termly Pupil Progress Meetings and update our summative school tracker. The main purpose of all assessment is to always ensure that we are providing excellent provision for every child.

### **Nurturing – Personal Development & Wellbeing**

- SMSC (Spiritual, Moral, Social and Cultural development) as well as Character Education is a 'golden thread' that runs throughout the Maths curriculum.
- We promote deep thinking and encourage students to question how the world works, fostering their spiritual growth. Mathematics is explored as a tool to understand and interact with the world, through rich, inspiring, and challenging tasks. Mistakes are embraced in a safe and supportive environment, with opportunities for discussion and reflection to enhance learning.
- In addition, Maths lessons are designed to encourage collaborative problem-solving which develop our school values and provide challenge and ambition, as well as self-management and resilience.

### **Creative – Teaching & Learning**

- Rosenshine's Principles of Instruction play a key role in developing knowledge and skills so that children know more and remember more overtime across all subject areas of the curriculum:
  - Present learning in small, coherent steps
  - Ask key questions
  - Provide explicitly clear and excellent examples
  - Guide children's practice
  - Systematically check children's understanding
  - Obtain a high success rate
  - Provide scaffolds for challenging activities
  - Provide opportunity for independent practice
  - Review learning monthly/ weekly
- We recognise that not all learning needs to be captured in the written form and or by every child. Whole class books, video or sound recordings, photographs or conversations/observations are often just as valuable in demonstrating understanding.
- As a school, we believe that fluency is key. Children need to have a secure understanding of basic principles in order to deepen their knowledge of the maths curriculum further. Through our rigorously planned curriculum, children are encouraged to challenge themselves through the use of critical thinking and efficient and effective approaches to problems which they may face.

### **Inclusive – Success for all**

- Maths lessons are designed to provide our pupils with the scaffolding required to access the learning at all levels.
- Teachers ensure that any form of differentiation is appropriate and does not place a glass ceiling on learning for any child, no matter their ability or needs.
- Where necessary, individual adaptations are made to meet the needs of children with high levels of SEND.

## **Impact – What is the impact of our curriculum on the students?**

Upon completion of Year 6, our curriculum enables pupils to be fully prepared and equipped to successfully continue their mathematical learning journey at secondary school and in their later lives.

We aim to ensure that they:

- 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 non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.