



## Intent – what we aim to achieve

Maths equips pupils with ways to describe, analyse and solve. It can stimulate moments of achievement for all pupils when they solve a problem for the first time, discover a solution, or notice hidden connections. Pupils who are explorative in maths are able to think independently in applied and abstract ways.

At Newstead Academy, we have the highest expectations and aspirations for all our pupils. We recognise that Maths in all its forms is a key and fundamental skill. We are committed to providing every child with the best possible opportunities for to explore Maths in a range of ways and our curriculum is tailored to meet each child's individual need.

It is important that our Maths curriculum at Newstead includes rich opportunities for all children to develop their Maths skills and that teachers deliver this in a bespoke way to meet each child's individual needs. By providing frequent and varied opportunities to build and apply their understanding, children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. They also require opportunities to build their spatial reasoning skills across all areas of mathematics including shape, space and measures. We provide learning opportunities through real-life personal experiences in Maths including weighing and measuring ingredients, spending money as part of a role play shop or identifying shapes and numbers in the local environment. It is important that children develop positive attitudes and interests in maths, look for patterns and relationships, explore connections, and not be afraid to make mistakes.

**Solid**   
**Foundations**



## Implementation - how we will achieve our aims

Our Maths curriculum is delivered through **Schema play**, **Cherry Gardens** and **The White Rose Maths Curriculum** along with the implementation of the Mastery Approach from **NECTM**. We apply the **Concrete, Pictorial, Abstract approach (CPA)** to our teaching of maths to develop a deep and sustainable understanding of maths for pupils

### **Taking account of learners' needs**

Visual supports such as Now and Next boards, visual timetables, symbols and communication boards form a key part of our Maths journey at all Stages. Children may spend significant time working at each Stage as they progress from accessing activities with physical or visual prompts to being able to do this independently.

### **Pre-Formal Stage**

Based on exploring Maths through Schema play and Sensory experiences. Schematic play happens when children are involved in repeated actions or certain behaviours as they explore the world around them and try to find out how things work.

### **Concrete**

The concrete stage is the "doing" stage. During this stage, students use concrete objects to model problems allowing children to experience and handle physical (concrete) objects,

### **Pictorial**

Pictorial is the "seeing" stage. Visual representations of concrete objects are used to model problems. This stage encourages children to make a mental connection between the physical object they just handled and the abstract pictures, diagrams or models that represent the objects from the problem.

### **Abstract**

Abstract is the "symbolic" stage, where children use abstract symbols to model problems. Students will not progress to this stage until they have demonstrated that they have a solid understanding of the concrete and pictorial stages of the problem.

### **Fluent Stage**

When children are fluent they are able to calculate accurately and efficiently and be flexible in their choice of strategies. They feel confident in working with numbers and can explain their thinking and apply their understanding in different contexts.



## Impact - how we will know we have achieved our aims:

Assessment is used to monitor progress and identify children needing additional support, challenge or adaptations.

Planning shows fidelity to our chosen curriculum pathways and is ambitious for all with the necessary adaptations made to meet the needs of our learners.

The Pupil Voice reflects enthusiasm for Maths. Pupils demonstrate that they can explore, solve and reason using their skills.