



## Intent

### What we expect the children to learn

We aim to provide children with a firm foundation to understand the world and be able to operate in everyday life. This involves ensuring that our children:

- 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
- **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

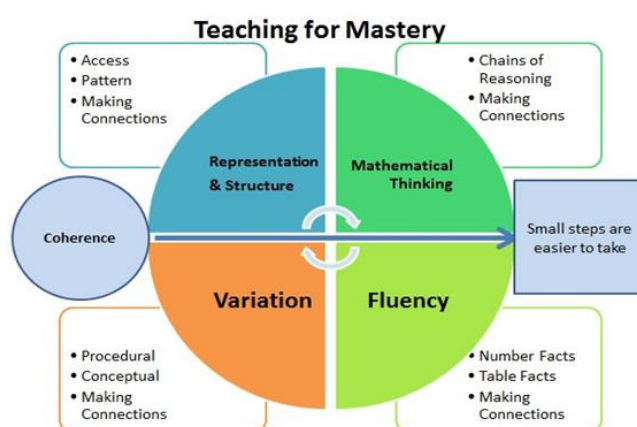
More specifically, we want Moorside pupils to:

- develop positive attitudes and interests towards mathematics and express curiosity about the way numbers work
- have a go and are not afraid to make mistakes
- use and apply mathematics in their environment and the wider world
- have a deep and thorough understanding of mathematics so that they are able to access learning in other subjects and can be successful at secondary school
- be financially aware

## Implementation

### How the subject will be taught

Teaching is based on the principles of 'Mastery' and a 'spine' to our teaching is provided by 'White Rose Maths', with teachers adapting lessons and resources to meet the needs of their class.



In more detail:

- Stem sentences are used to reinforce key vocabulary
- Working walls are used to reflect and reinforce key lesson content
- Discrete fluency teaching is used to introduce and practice methods and skills
- We provide opportunities to practise and reinforce previously learned material
- Lessons follow the mastery approach which includes consistent representation and structure, mathematical thinking, variation, fluency and coherence (small steps)
- Resources are used to support children's conceptual understanding throughout school. These can take the form of concrete, pictorial and abstract representations
- Problem solving and investigation is integrated into lessons to deepen the learning experience and so that children have the opportunity to apply their understanding and skills in different contexts
- A range of Apps and programmes are used to reinforce the retention of mathematical facts
- A range of additional support strategies are used to ensure that children fully grasp the skills and content being taught eg 1-to-1 or small groups

## Impact

### What children know and remember (and how we know)

Our children's learning is assessed and monitored in a range of ways:

- Formative assessment underpins all aspects of mathematics planning, teaching and learning to ensure all learners can move forward building on a solid foundation
- Gaps are identified and addressed through whole class, small group and one-to-one support
- All children move forward in their learning that is appropriate to their Year group while being challenged and engaged
- Subject leaders monitor and evaluate books to ensure that misconceptions are being identified and children are addressing their errors and misconceptions through self-correcting in green pen or responding to a teacher's questions
- End of unit assessment is carried to identify where gaps remain so they can be addressed
- Standardised tests are used from Y3-Y6 to provide a guide to the attainment and progress a child is making. The test also help to identify gaps which need addressing

