



# Mathematics

## Intent

*'Inspiring, nurturing and supporting each child, every day to develop citizens for the future.  
Our School lays the foundation for a lifetime love of learning'*

At Summerhill Infant School our aim is for every single child to become fluent in the fundamentals of mathematics. We have a significant number of EAL and Pupil Premium Pupils at our school and our pupils generally begin Reception below national expectations. Raising the outcomes for these Pupils is a key feature of how we have designed our curriculum.

We are acutely aware of the differing needs of the learners in our classes and adapt our planning and teaching accordingly. We measure progress from individual starting points so all Pupils have their achievements recognised and celebrated. Maths is taught in daily lessons, and it is embedded across our curriculum. We strive for a high level of numeracy for all.

Our intention is that:

- Pupils become fluent in the fundamentals of mathematics.
- Pupils progress from concrete models, through pictorial and finally to more abstract models.
- Pupils develop the oral skills to be able to talk about their learning with their peers, teachers and others.
- Pupils develop their ability to reason and solve problems at all stages of their education.
- Pupils enjoy learning about mathematics and can apply their learning to the real world.
- Pupils develop the resilience and learning behaviours needed to tackle tasks that they may find challenging.
- Pupils remember and build on what they have already learnt so learning builds on from the learning children have done so far.
- Pupils who have gaps in their understanding or knowledge are supported to catch up with their peers.
- Pupils receive regular feedback about their learning so they know what they have done well and how they can improve.

## Implementation

- Every child and every class of Pupils is different and responds to different approaches and stimuli. Teachers in Summerhill know their Pupils very well and plan their lessons with them in mind. Supporting that is our agreed expectation that all Pupils become fluent in the fundamentals of mathematics.
- Teachers are supported in planning their lessons by use of Primary Stars, helping to ensure coverage, consistency and progression across the school. Teachers adapt these plans when required to ensure they are meeting the needs of the children in their class.
- Within the Primary Stars plans, lessons are developed with small steps in mind. Pupils have the time to master a concept before moving onto the next stage of their learning. Repetition of key skills, such as counting, is carried out regularly in order to ensure this learning is embedded.

- Pupils build on what they have already learnt. Lessons are planned to review what Pupils have already learnt and to support Pupils in making links to other related content.
- Throughout the school, pupils progress from concrete models, through pictorial and finally to more abstract learning within lessons and across units of work. A range of concrete resources are available in all classrooms for children to access to support and deepen their learning in maths.
- Maths working walls are updated regularly, following expectations set out in our Summerhill Maths Working Wall policy. The working walls aim to support children with their current learning and enable greater independence.
- Pupils develop the oral skills to be able to talk about their learning with their peers, teachers and others. We teach pupils key Maths vocabulary linked to their current unit of learning, which is then displayed to support learners and for regular reference. Teachers support the Pupils' development of language by carefully modelling how to use mathematical language. Pupils are expected to use mathematical vocabulary in their reasoning and problem solving. They are expected to listen to each other and agree or disagree with each other when necessary.
- Pupils are able to reason appropriately and solve problems at all stages of their education. In Key Stage One, daily lessons include reasoning and problem solving for all Pupils. This is scaffolded in classes with sentence stems and modelling from teachers. Pupils are expected to express themselves clearly and concisely in full sentences. Pupils are encouraged to agree or disagree with both each other and teachers, and to give their reasons why.
- Pupils enjoy learning about mathematics and to be able to apply their learning to the real world. Lessons include practical challenges, games and recording Pupils' work in books. Teacher's and other adults record learning with photographs and videos, and Pupils are able to reflect on what they are learning and have learnt. Learning in maths is linked to other curriculum areas and these links are made clear by teachers to the Pupils.
- Pupils develop the resilience and learning behaviours to tackle tasks that pupils may find challenging. Teachers highlight which learning behaviours they are looking for and what they can see when Pupils are learning. Pupils' successes are celebrated and encouraged.
- Pupils who have gaps in their understanding or knowledge are supported to catch up with their peers. Lessons are differentiated to ensure there is appropriate challenge for all learners. Differentiation includes having different questions, adult support, different resources and more or less pace. Pupils enjoy working with adults in small groups, but also develop the skills to work independently. Key questions allow children who are ready to work independently to do so, and children who require more scaffolding to get more support. Children get opportunities to be challenged by the teacher after showing mastery in their fluency.
- Pupils learn best when they receive feedback about their work and learning immediately. Where possible, feedback is given to Pupils as they complete their tasks which includes marking Pupils' books alongside them. Teachers assess their Pupils regularly in a variety of ways. This includes entry assessments, end of block assessments, looking at Pupils' work with colleagues and senior leadership and talking to Pupils about their learning.

## Impact

- Our curriculum recognises the low starting points our Pupils enter the school with and ensures that all Pupils are enabled to be successful and make the best possible personal academic progress. The attainment of Summerhill Pupils at the end of Key Stage One is typically in line or above national average.
- Pupils enjoy maths and the wide variety of activities that they can do in maths lessons. They can apply their mathematical understanding and knowledge in subjects across the curriculum.
- Pupils are taught the whole mathematics curriculum, with well mapped out coverage and progression across the school.
- Pupils master what they have learnt and are able to build on this at each point in small steps. Planning and teaching targets each individual child's next learning step so as every child is making progress.
- All groups of Pupils, including disadvantaged Pupils, achieve well so that the difference between groups is diminished.
- Pupils leave our school as more confident and independent mathematicians who are aware of their own developing resilience and perseverance.
- Pupils have developed their independence and ability to work collaboratively. Pupils' progress is accelerated by their skills in speaking and listening developing, so that they can learn from adults and each other.