

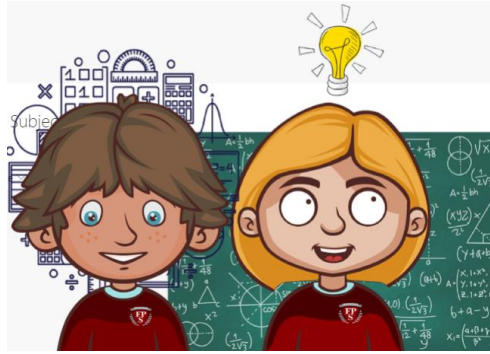


# Maths Policy

Ferndale Primary School

School Policies | 2017, 18, 2020, 21, 22

Review Autumn 2025



## **Intent**

At Ferndale Primary School, we aim to teach children how to make sense of the world around them by developing their ability to calculate, reason and solve problems. We aim to support children by equipping them with a range of computational skills (fluency), problem solving skills (application) and reasoning skills (verbalise their understanding), in a variety of contexts, including real life scenarios.

Our aims in the teaching of mathematics are:

- to promote understanding of learning through our three step **CPA** (concrete, pictorial, abstract) approach to mathematics
- to develop confidence and competence with numbers and the number system, through frequent revisiting of place value
- to become fluent in the fundamentals of mathematics, through frequent practice with increasingly ability to recall and apply knowledge accurately
- to develop the ability to solve problems in a range of contexts
- to be able to make links between different contexts in maths and transfer skills
- to be given opportunities to reason mathematically, through regular opportunities to explain a process
- To develop a rich mathematical vocabulary, to support children with reasoning.

## **Implementation**

At our school, we teach mathematics to all children, whatever their ability or individual need. Some children may receive the curriculum in small group contexts or even on a 1: 1 basis, to allow them to make good/better than average process.

Every child has an equal right to be taught mathematics, in daily lessons of approximately 1 hour.

We aim for children to master the key areas and domains in Mathematics. Children are given the opportunity to build on a domain by revisiting the skill three times during an academic year, in order for children to know more and remember more. We see this as a benefit as children are able to build on what they have previously learnt. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress will always be based on the security of pupils' understanding and their readiness to progress to the next stage. The school offers adapted tasks (bronze, silver, gold and platinum where applicable), which allows fluidity, progression and deepening of understanding between tasks. In addition to this, we have a daily arithmetic and mental maths challenges for the children to complete on whiteboards which focuses on the continual development of calculation skills, alongside a main topic. We aim to challenge pupils who grasp concepts rapidly, to deepen their understanding by offering challenging problems, including many solutions problems.

We believe that all students, when introduced to a key new concept, should have the opportunity to build competency in this topic by taking the concrete-pictorial-abstract approach- a universal language.

**Concrete** –opportunity to use concrete objects and manipulatives to help them understand what they are doing.

**Pictorial** – students should then build on this concrete approach by using pictorial representations.

**Abstract** – with the foundations firmly laid, students should be able to move to an abstract approach using numbers

During our daily lessons we encourage children to make links with previous learning through the use of 'reviews', before introducing them to problem solving/reasoning skills. As an interim assessment opportunity, we provide our students with 'Secure it' challenges, to be able to assess their understanding. We develop the children's ability to represent problems using visualisation skills, including jottings and pictorial representations.

The Early Years Foundation Stage Curriculum feeds into the National Curriculum. Numeracy activities are used to begin the day as a trickling in activity- doors open at 8:40am. It is good practice to make use of cross curricular links to enable children to use their learning in a real life context. Therefore, pupils are given plenty of opportunities within sessions to use and apply the mathematical skills and concepts they have learned.

All classrooms will have a display area specifically for mathematics, to show the topic currently being taught. This is used more like a working wall in English where previous and new knowledge is displayed, to support the children's understanding. It will also show key vocabulary relevant within that topic for children to use during their reasoning tasks.

### **Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers**

All children will have Quality First Teaching. Any children with identified SEND or in receipt of pupil premium funding may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points. SEND children are also expected to undertake problem solving and reasoning challenges, so not to cap their learning.

### **Impact**

Assessment for Learning is fundamental to raising standards and enabling children to reach their potential. Assessment in mathematics takes place daily using a range of strategies such as 'Review it' tasks, 'Secure it' challenges planned into the lesson, live marking and verbal feedback with children. At the end of each term, each child with also access assessment activities to allow children to apply their learning with independence. Where answers may not be correct, we allow children the opportunity during the lesson to respond to their verbal feedback and complete their 'Now' tasks. Where children have responded to their feedback, this is indicated in green pen.

Teachers use termly assessment to inform their planning, map out the weekly learning journey and targeted intervention support. Moderation of teacher's assessment is completed termly after formal moderation using learning ladders and performance on independent assessment activities, to ensure judgements are accurate. Children are formally tracked using our tracking grids (SIMs). This data is used by the Mathematics Subject Leader, Senior Leadership team and Head teacher to review children against Age Related Expectations based on their Key Stage starting points. Children who are not on track are identified for intervention/target teaching on teachers' Provision Maps.

## **Monitoring and Evaluation**

The quality of teaching and learning is monitored as part of the appraisal process through lesson observations, planning moderation, book looks and through termly pupil progress meetings. SWOT analysis is shared within SLT meetings to review maths and current practice. TLR time is then used to support, research and make amendments based, on needs identified.

## **Partnerships with parents**

In October/November, we hold a SAT's meeting to share dates and practices used within school to support children. Following this, we invite parents into subject specific workshops to demonstrate current practices we use in school (methods of calculation, bar modelling and steps on how to solve problems). Parents are kept informed of topics that are being covered the following term, through a newsletter which is sent half-termly. During Parents' Evenings curricular targets are shared and mid-term progress report is sent out in Spring 1, followed by a written report in the Summer Term.

Currently, homework challenges are set through Times Tables Rockstars for children to access and there may be a link to a mathematical skill when sending home the termly topic grid sheet however this is not an expectation. Year 6 also receive additional homework in the Spring term, which focusses on the current maths topic and any areas for development.