

# Swindon Village Primary School



Intent, Implementation and Impact

# Maths at Swindon Village Primary School

# **Curriculum Intent**

The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience so that they are fully prepared for the future. It is essential that these keystones of Mathematics are embedded throughout all strands of the National Curriculum.

Through the SVPS approach, it is intended that all children, regardless of their starting point, will maximise their academic achievement and leave Swindon Village Primary School with an appreciation and enthusiasm for Maths, resulting in a lifelong positive relationship with number.

### What a Maths lesson looks like in our school:

- A high quality curriculum that is both challenging and enjoyable.
- Clear 'Steps to Success' units are broken down into small manageable steps and teachers can see where they need to get the children to and how they will get there.
- Maths Talk children are provided with the opportunity to develop deeper understanding through communication. Individually or in groups, children articulate and explain their ideas and analyse the reasoning of others.
- The opportunity to revise and revisit previous learning through focused target sessions to consolidate learning (prior learning and MOT sessions).
- Children make connections between mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Maths resources are an integral part of every lesson.

#### We aim for all children to:

- Believe that everybody can learn to be a mathematician.
- Demonstrate a positive attitude towards learning, which is encouraged through the SVPS Yeti (I can't do it...YET).
- Be independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.

- Become fluent in the fundamentals of mathematics (see Year by Year Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.
- Make cross-curriculum links and apply their mathematical knowledge to science and other subjects.

## **Curriculum Implementation**

Our implementation is developed through secure understanding of the curriculum and subject area.

#### Teaching and Learning, Content and Sequence

- Our long term and short term planning follows the <u>National Curriculum 2014</u> and <u>Development Matters 2021</u>. Termly, weekly and daily lessons follow the CanDo Maths planning framework.
- We provide a bespoke teaching and learning experience that is designed to interest, inform and inspire our children.
- Where applicable, prior knowledge will considered for lesson planning so that all children can make good progress.
- Lessons follow the Swindon Village Primary School agreed structure where all children work together so that we can learn from each other and achieve together. Children talk about their ideas and share their reasoning, with adults questioning them thoughtfully to support and deepen learning.
- Prior to the Maths lesson, children will partake in @Home With Number (@HWN) sessions where they will work on fundamental number skills.
- Children work as a class during the direct teaching of a specific small step before moving on to independent tasks. 'Do Its' give the children the opportunity to demonstrate their fluency (or 'Do it\*' for children who need an adapted task), 'Explain Its' challenge the children to demonstrate their reasoning skill by explaining misconceptions, 'Use Its' allow the children to deepen their understanding and apply previous knowledge to a range of reasoning problems and 'Challenge It' allows children explore open-ended problems further deepening their mathematical understanding.
- We revisit previous learning using 'Retrieve Its' and MOT (Maths on Track) sessions to further deepen understanding an imbed learning.
- MOT sessions are informed by previous lessons/assessments and 'Nail-it' documents to allow the opportunity to revisit learning and consolidate previous learning.
- Lessons are engaging and follow the CanDo Maths Small Steps framework, to ensure that we can evidence progress over short and long periods of time.
- Where applicable, lessons are designed with a concrete, pictorial and abstract (CPA) approach allowing children to understand the concepts more deeply.
- We place a large emphasis on pupil engagement and design lessons which involve all pupils, using questioning and modelling at the centre of every lesson.

- Lessons include the positive use of mistakes and specific misconceptions to develop reasoning skills.
- To implement our intent, we ensure that our children are invested in their learning and are making a positive contribution to their lessons.

#### **Supporting learners**

SVPS ensures that all children can access learning in Mathematic by:

- Adjustment of task (when appropriate).
- Small group or 1:1 support where and when necessary.
- Afl strategies used in the classroom to assess children's learning and adapt teaching or tasks where necessary.
- Providing additional activities to challenge children.

SEND or EAL children are supported at SVPS by:

- The teaching of vocabulary for lesson concepts.
- Additional maths activities provided to support learning new concepts e.g. 4 operations, times tables.
- Seating children alongside good role models to support one another.
- Providing visual or practical prompts as well as access to manipulatives (where applicable).
- Work may be adjusted so that all children can meet the Learning Objectives (or the learning objectives of their working level).
- Teachers to use AFL to identify which children will need support during lessons.
- Teaching lessons using a variety of techniques to appeal to different learning styles such as visual, auditory, kinesthetic.

#### Leadership, Assessment and Feedback

- Assessment informs teaching and additional Maths provision.
- Children who are not making the required progress are given extra support through Maths On Track sessions and support in class
- Feedback is given on children's learning in line with our feedback policy. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through planned questioning or additional activities.
- In order to support teacher judgments, children are assessed using termly 'Remember It' assessments; Tri-yearly NTS Assessments and EYFS 'Stepping Stones'.
- Analysis of any tests that the children complete is undertaken and fed into future planning of MOT (Maths on Track) sessions.

- Summative assessments are completed at the end of the academic year and help influence the overall judgement reported to parents in the end of year report.
- The Maths leaders have a clear role and overall responsibility for the progress of all children in Maths throughout school. Working with SLT, key data is analysed and regular feedback is provided and discussed at pupil progress meetings to inform on progress and future actions.

## **Curriculum Impact**

A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

- Children can talk confidently about their Maths and demonstrate a good understanding of the Maths they have been taught
- Children demonstrate quick recall of facts. This includes the recollection of the times tables.
- Children can apply efficient and accurate calculation procedures for the four operations.
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Children show increasing confidence and believe that they will achieve.
- Children show a high level of pride in their work.