



Selattyn C.E. Primary School

Statement of Intent for Mathematics

Our School Vision

As a loving community, our vision is to nurture each individual in our care, giving them the skills, resilience and hope to succeed and flourish, both academically and spiritually, in God's ever changing world.

Intent

At Selattyn CE Primary School our intent is to inspire an enjoyment of mathematics through independence and self-motivation. We value the development of lively and enquiring minds, enabling all children to develop resilience to succeed and flourish in their learning journey. Mathematics teaches us how to make sense of the world. Our aim is to equip all our pupils with a high-quality mathematics education that provides them with a foundation for a deep knowledge of mathematics; the ability to reason and problem solve in the real world.

Our Maths curriculum is arranged in a spiral model, where revisits are planned for, knowledge is embedded over time, and children have opportunities to revisit and deepen their understanding when most appropriate. At Selattyn C.E. Primary School our Sequence of Learning allows for progression to ensure that the revisit offers more depth and scope.

At Selattyn C.E. Primary School we appreciate the importance of knowledge. The categories of knowledge are defined as:

- **Declarative** 'I know that'
- **Procedural** 'I know how'
- **Conditional** 'I know when'

Our carefully considered and sequenced curriculum offers all pupils the most efficient and useful procedures for all aspects of finding solutions. We aim for the understanding of underlying principles of mathematics, as well as speed and accuracy.

Our ambition is to develop our cross curricular links with mathematics so that connections are strengthened through all of our teaching.

Implementation

At Selattyn C.E. Primary School our spiral model is arranged to support teaching in mixed age classes. The content and the sequencing of topics and themes ensures that our curriculum offers a guarantee of long term learning. This is supported by the opportunity to revisit and consolidate core knowledge that ensures all pupils can transform facts and methods into problem solving strategies.

At Selattyn C.E Primary School we use White Rose Mathematics to underpin our teaching and learning. We use the resource, matched with our curriculum sequence, skilfully and flexibly selecting resources and exercises that meet the learning needs of our pupils.

We use the Concrete, Pictorial, Abstract (CPA) approach to help pupils understand mathematics and make connections between different representations and make sense of mathematics. This also ensures that knowledge is committed to their long term memory and prompts pupils to retrieve knowledge effectively.

- **Concrete** – manipulatives and practical resources that support conceptual development, such as counters, cubes, Dienes/base 10
- **Pictorial** – the role of diagrams and graphics to expose facts and relationships, such as bar models and whole part diagrams.
- **Abstract** – the language of written mathematics using signs symbols and notation such as equals signs, operations symbols and algebraic expressions.

Other quality assured resources may be selected from to enhance the White Rose resources when required. These include Nrich, ISee Reasoning and MathsBot.

Calculation is at the heart of what we do because it underpins the rest of the mathematical aspects that we teach, including geometry and measurement. We teach mathematical fluency as the ability to quickly and accurately recall mathematical facts and concepts. It is our belief that all pupils must master the basics and know how to apply them. Our curriculum promotes fluency as accuracy and speed. At Selattyn C.E Primary School we have guidance that identifies the key facts and knowledge in each year group for automaticity. (See further guidance below.)

The National Curriculum for Primary Mathematics has three main aims which are at the heart of how the children learn mathematics in school. These are:

- **Fluency** –The children will have varied and frequent practise with increasingly complex problems over time, so that they can develop understanding and the ability to recall and apply their mathematics rapidly and accurately.
- **Reasoning** – The children will follow a line of enquiry, investigating relationships and generalisations, developing an argument and justification and proof using mathematical language.
- **Problem Solving** – The children can apply their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

In EYFS we follow the Development Matters Framework. We are developing a strong grounding in number essential for all children to develop the necessary building blocks to excel mathematically.

Impact

At Selattyn C.E. Primary School we measure the impact of our curriculum through the following methods:

- Summative assessment - Reception baselining, Key Stage 1 and 2 SATS, NFER standardised termly tests for years 1 – 6, Multiplications tables check (Year 4)
- Formative assessment –used on a regular basis to assess pupil progress, inform planning and influence lesson design including ALF strategies.
- Monitoring – Subject lead will carry out lesson monitoring, book scrutinies, pupil voice, learning walks, and collaboration with a link governor. Teacher discussions around good practice and

improvement. Involvement with local consortium schools to develop teaching and to take part in local curriculum initiatives.

- Moderation – Cluster moderation to validate judgements on standards and progress.