

Statement of Intent for Mathematics

Our School Vision

Nurture, Grow, Flourish

“For I know the plans I have for you,” says the Lord... “plans to give you HOPE and a FUTURE.”

Jeremiah 29:11

We are committed to creating a positive, safe and nurturing Christian environment, where all members of the school and wider community will be respected and valued.

Within God’s love, we will support and encourage one another to grow and flourish...
to be the very best we can be.

Intent

Why do we teach this? Why do we teach it in the way we do?

Mathematics is an important creative discipline that helps us to understand and change the world. We want all pupils at Forest and Sandridge Primary School to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding.

At Forest and Sandridge we foster positive can do attitudes and we promote the fact that ‘We can all do maths!’ We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. At our school, the majority of children will be taught the content from their year group only. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.

We aim for all pupils to:

- become **fluent** in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- be able to **solve problems** by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios
- **reason mathematically** by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

Implementation

What do we teach? What does this look like?

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be.

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

Maths Lesson: Unit planning based on National Curriculum Statements (Themes), manageable steps (Can Do Maths & Maths Nav).




Children are taught Mathematics for approximately 1 hour daily (split between two sessions: Maths and Mini Maths). Support is determined during each lesson to ensure secure understanding based on the needs of the child.

Challenge is visible throughout the whole session, where children are asked to reason and prove their understanding at a deeper secure level.

Lesson Hooks are included at the start of lessons to provide children with real life problems, wherever possible, and to engage children from the very start of the lesson. Lesson hooks can also include games, puzzles or discussion points.

Each unit, or half term, children work towards an end goal of a Maths Motivator. This provides children with an opportunity to use and apply the skills that they have been learning and practicing in Maths lessons in a meaningful way. Where possible, Maths Motivators are cross-curricular and link to relevant topics that the children are currently studying.

Maths Lessons:

Daily Maths Lessons (9:15 – 10:00) Designed to Support and Challenge
<i>Teach it!</i>
<i>Practice it!</i>
 <i>Do it!</i>
 <i>Twist it!</i>
 <i>Deepen your understanding!</i>

Lesson Design:

- 1) Date and WALT
- 2) Lesson Hook – a question, problem or discussion point to engage children
- 3) Teach it!
- 4) Practice it!
- 5) Do it! Up to 5 examples – 3 ‘Standard’ and 2 ‘Non-standard’
- 6) Twist it! Misconceptions (True/False, Spot the mistake, Explain why and Prove it)
- 7) Deepen your understanding! New problems, (Empty box, Here’s the answer and always/sometimes/never)
- 8) Lesson Recap

Mini Maths Lessons:

Daily Maths Meetings Practising, Consolidating, Intervening
Skills Sessions Arithmetic/Intervention/Practise/Problem solving

Re-cap on previous learning from Maths lessons or key learning areas such as number bonds, doubles, times tables, quick re-call division facts etc. Teachers are encouraged to use ‘Mini Maths’ sessions to immediately tackle misconceptions and consolidate learning if not understood in the morning teaching session.

Impact

What will this look like? By the time children leave our school they will:

By the end of KS2 we aim for children to be **fluent** in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

They should have the skills to **solve problems** by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to **reason mathematically** by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.