



Maths Subject Overview

In order to achieve our whole school intent, we have identified 3 Golden Threads that weave through our curriculum and underpin everything we do. This means that in delivering our curriculum we are embedding our school **Christian Values**, developing **knowledge and skills** progressively over time with an ambitious and aspiring curriculum whilst immersing our children in **language rich** teaching.



Intent

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 challenges 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




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. We welcome parents during the year to take part in a maths family learning morning, where you work alongside children in the classroom.

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

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.

Maths Lessons:

Daily Maths Lessons Designed to Support and Challenge
Teach it! Practise it!
 Do it!  Twist it!
 Deepen your understanding!

Lesson Design:

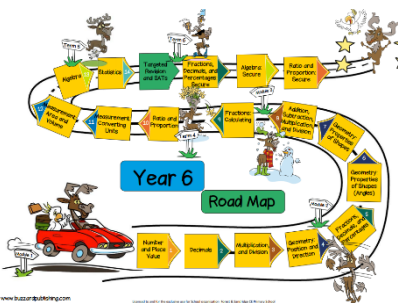
- 1) HOOK or daily 10
- 2) Teach it!
- 3) Practice it!
- 4) Do it! Up to 5 examples – 3 ‘Standard’ and 2 ‘Non-standard’
- 5) Twist it! Misconceptions (True/False, Spot the mistake, Explain why and Prove it)
- 6) Deepen your understanding! New problems, (Empty box, Here’s the answer and always/sometimes/never)
- 7) Lesson Recap

Mini Maths Lessons:

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

Recap on previous learning from Maths lessons or key learning areas such as number bonds, doubles, times tables, quick recall 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.

Planning



Year 6 Term 1

Topic	Maths Lessons: Intelligent Practice	Maths on Topic: Deliberate Practice
Number and Place Value	... (text continues) (text continues) ...
Arithmetic	... (text continues) (text continues) ...
Algebra	... (text continues) (text continues) ...
Geometry	... (text continues) (text continues) ...
Statistics	... (text continues) (text continues) ...

Year 6 UK 1: Number and Place Value

Curriculum Progression	Depth of Understanding
Represent 7 digit numbers	Recognise the value of digits in 7 digit numbers
Read 7 digit numbers in words	Write 7 digit numbers in words
Round 7 digit numbers	Compare 7 digit numbers
Order 7 digit numbers	Place value

“For I know the plans I have for you,” says the Lord... “Plans to give you hope and a future” Jeremiah 29:11

Nurture, Grow, Flourish.

Impact- How do our Golden Threads work within this subject?

Christian Values – Maths supports our Christian Values by giving us the knowledge and skills to take **courage** in our learning to apply mathematical skills to a variety of different contexts. All children will have the ability to flourish no matter their starting point.

Knowledge and skills – 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.

Language Rich – In Maths we teach **key mathematical language** that is specifically linked to each key teaching point which children are encouraged to use in their everyday mathematical conversations. This encourages them to become confident and articulate mathematicians. **STEM sentences** are used in each lesson to encourage children to talk like mathematicians and make links with their prior learning. Teachers confidently model mathematical discussion using **STEM sentences** so children are regularly exposed to these. **Generalisations** are also used within lessons to build confident learners who are able to apply their skills confidently.

Scaffolding/supporting SEND/lowest 20%: What do we do and how does this look?

Teachers try to identify potential barriers at the planning stage. In their planning, they consider ways of minimising or reducing those barriers.

Lesson design:

- Recapping learning from the previous lesson. Children may revisit their work from the last lesson to remember/improve/tweak/adjust.
- Consolidation is built in through curriculum design. Opportunities are provided for pupils to repeat and reinforce previously learnt skills and processes on a regular basis, in similar and different contexts.
- The curriculum is designed in a way that allows pupils to make links to the real world.
- Scaffolded tasks to support those need additional support.
- Whole class discussions (e.g. the teacher may do a mini plenary where common misconceptions are identified and discussed or where they share examples of pupil work on the board).

Environment

- Key vocabulary displayed on the board so children can use correct terminology in their discussions.
- Flexible seating options in case children need to move during the lesson.

Resources

- Adult support (e.g. additional modelling or explanation)
- Peer support
- Checklist of steps to complete (e.g. on the flip chart or slides printed)

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