

Mathematics

Curriculum Intent

The Early Years Framework and National Curriculum for Key Stage 1 and Key Stage 2 Mathematics aims to ensure that all children become fluent in the fundamentals of Maths, are able to reason mathematically and are able to apply their mathematical skills to enable them to solve problems.

At St Joseph's Catholic Primary School, we intend to provide a Mathematics curriculum, which is accessible to all children across the whole of the primary phase. We deliver lessons that are engaging and well-resourced to enable access to learning for all children. Our children strive for excellence, and are able to work both independently and co-operatively with a fascination for solving mathematical problems.

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.
- Solve problems by applying their Mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts.
- 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 enabled mental calculations and written procedures to be performed efficiently, fluently and accurately.

We are committed to ensuring that children are able to recognise the importance of Mathematics in the wider world, preparing them for all aspects of life including their transition into secondary school.

Curriculum Implementation

Teachers use a range of teaching methods within each lesson, testing the children's ability to develop their conceptual and procedural knowledge throughout a range of units. Precise use of mathematical vocabulary is supported through the use of stem sentences to support children in using mathematical vocabulary within each session. Knowledge is assessed daily and early intervention is put in place to ensure that the children make progress in their learning daily. All children within school have the opportunity to access the learning at an age appropriate level so that no child gets left behind.

Mathematics lessons at St Joseph's

Mathematics lessons: Teach up	
M/T/W/Th/F: 9.20 – 10.05	
'Learning Together'	'Support and Challenge'

Maths On Track Meetings (MOT): Keep up	
M/T/W/Th/F: 12.00 – 12:25	
Deliberate Practice Sessions	
Arithmetic/Intervention/Practice	

Each lesson focuses on a manageable step of new learning based on the National Curriculum statements.

Typical lesson design:

- 1. Hook It: Introduction
- 2. Teach It: Live modelling of the new learning with explicit use of potential misunderstandings
- 3. Practise It: All children practise together Support and Challenge
- 4. Do It: Up to 5 examples 5 'What it is' or '3+2 'What it is/What it's also'. *Challenge 1: Procedural Fluency*
- 5. Secure It: 1 or 2 misunderstandings (True/False, Spot the mistake). *Challenge* 2: Conceptual Understanding
- 6. Deepen It: Apply understanding to solve new problems, *Challenge 3: Mathematical Thinking*
- 7. Review It: Lesson Recap: Keep Concept Statement and Key Vocabulary

Maths On Track (MOT) Meetings:

Day 1: Arithmetic

Day 2: Arithmetic

- Day 3: Deliberate Practice: Past and Present
- Day 4: Deliberate Practice: Past and Present

Day 5: Fact Friday

Curriculum Impact

The impact of our Mathematics teaching at St Joseph's is evidence in many ways across the curriculum. This includes work in the children's books, assessments and daily interactions and dialogue with the children. Children are assessed at the end of each unit where misconceptions are identified and addressed through the MOT sessions. Daily assessments are recorded and updated on to Insight so that no child gets left behind (Keep up).

We have high expectations of all staff and children to ensure that no child leaves St Joseph's without exposure to a range of Mathematical concepts and ideologies. The Maths Subject Leader consistently monitors the impact of teaching through the use of learning walks, book looks, planning scrutinies and pupil conferences to raise standards and improve outcomes in Maths across all age groups.