

## Intent

### Why do we teach Maths in this way?

The National Curriculum states, 'Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas.' Therefore, the intention for mathematics is to ensure that all pupils become fluent, reason mathematically and solve problems'.

At St. Joseph's, we have high expectations and aspirations of all children and promote confidence, resilience and determination in every lesson. All children are able to succeed and achieve in all areas of mathematics, using mistakes and misconceptions as a vital part of a child's learning. Most children will learn together, deepening and mastering the unit before moving on too quickly. Ensuring challenge is in every lesson too, providing rich, high order, multi-step problems.

At St. Joseph's, each Maths lesson will provide the opportunity for **all** children to:

- Become **fluent** in the fundamentals of mathematics.
- **Problem solve** – using what they know to find out what they don't know yet.
- **Reason mathematically** by articulating, proving and justifying their reasons, using mathematical language.
- The opportunity to work both **collaboratively and independently**.
- Make **cross-curricular links**, applying lessons to real-life situations, beyond the classroom.
- An ability to **think mathematically** – precisely, logically and creatively.

## Implementation

### What do we teach at St. Joseph's?

At St. Joseph's, we follow 'Inspire Maths' approach to teaching mathematics, from Y1-Y6. 'Inspire Maths' has been developed with leading UK educational experts and correlated to the new National Curriculum; recognised as one of the leading ways to teach and learn maths.

### What Inspire Maths looks like at our school:

- New concepts are highly scaffolded, allowing misconceptions to be addressed and make meaningful connections.
- A concrete – pictorial – abstract approach which ensures deep understanding of mathematical concepts.
- Spiral progression of skills builds up knowledge over time, enabling confident mathematicians.
- Guided sessions, promoting discussion, collaboration and exploration, with a strong emphasis on mathematical language and reasoning their answers.

### How Inspire Maths is delivered:

- **Let's Learn** – Making cross-curricular links, applying prior knowledge, and pre-teaching if necessary. Children must be ready to learn.
- **Guided Practice** – Modelled examples and Ping-Pong style questioning (assessing whether the class are ready to move on).
- **Let's Explore** – Working collaboratively in their text book with peers.
- **Thinking Caps On** – Independent work in their practise books.

In addition, children complete a daily fluency session every morning; arithmetic style questions, reinforcing and consolidating fundamental maths skills.

## Impact

### What does the impact of our teaching look like?

### By the time children leave St. Joseph's, they will:

- Have an increased understanding of Maths and the importance of Maths to the world around them.
- A great willingness to participate and become increasingly involved in all lessons.
- Increased confidence in their own ability and skills in all areas of mathematics.

Since moving to 'Inspire Maths', we believe all children will leave with outstanding outcomes in their own learning journey.

Linking to our school's '**Learning Skills**', all children will have greatly developed their:

- **Resilience** – A determined attitude to not give up, using a positive, growth mind-set.
- **Reflectiveness** – Being able to reflect on their own learning, understanding what was successful and identifying mistakes as opportunities to learn.
- **Collaboration** – The ability to work with peers to explore mathematical concepts and learn together.
- **Curiosity** – Having a strong desire to know or learn something new.
- **Independence** – The confidence to be able to work independently, applying their existing knowledge to find out answers they do not know yet.

