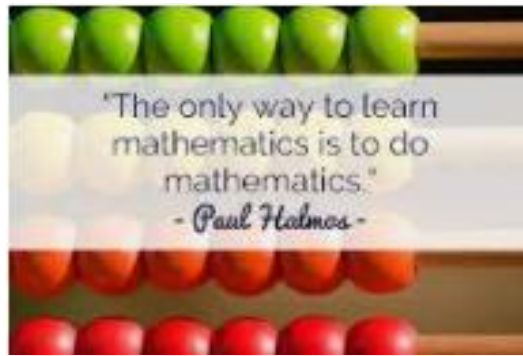




## Maths



### Curriculum Intent

At St Joseph's, the teaching of mathematics is of the highest importance as we know that it is an essential skill that will impact on the rest of our pupils' lives. We wholeheartedly believe that all of our children can succeed in mathematics. Our aim is to send our children to the next stage of their learning as self-assured, resilient problem solvers.

We hold the firm belief that all children can succeed at mathematics and welcome the challenge to do so.

We aim for our children to:

- become confident and fluent mathematicians.
- develop a fascination and love of numbers.
- solve problems by reasoning, explain their mathematical thinking clearly and apply their mathematical skills in a wide range of situations.

In order to achieve the above, we have a continuity of lesson design across the school which includes varied fluency questions, modelled problem solving and reasoning, additional problems and independent work. Manipulatives and various representations are used when appropriate in each lesson to support learning, moving from concrete to pictorial to abstract as the lesson/block of work progresses.

Correct mathematical vocabulary is taught and linked through each concept, with clear progression planned for.

### As a 'Mastery for Maths' school our vision is:

- ~ A positive attitude to mathematics as an interesting and valuable subject;
- ~ A range of learning strategies: working both cooperatively, collaboratively and independently;
- ~ Confidence and competence with numbers and the number system;

- ~ Be able to explore features of shape and space, and develop measuring skills in a range of contexts;
- ~ An understanding of the importance of mathematics in everyday life;
- ~ To ensure pupils become fluent in the fundamentals of mathematics;
- ~ Develop conceptual knowledge and an ability to recall and apply knowledge rapidly and accurately;
- ~ Ensure that pupils can reason mathematically and solve problems;
- ~ For our children to develop a 'can do' attitude and perceive themselves as mathematicians.

## **Implementation**

Key features of our Maths Mastery curriculum:

- ❖ High expectations for every child;
- ❖ Fewer topics, greater depth;
- ❖ Number sense and place value come first;
- ❖ Focus on mathematical thinking and language;
- ❖ Problem solving is central;
- ❖ Calculate with confidence- understand why it works.

As a school, we follow Power Maths alongside White Rose Maths to ensure that our children have access to a progressive curriculum, building on previous knowledge and skills. We have a renewed focus on the CPA approach and manipulatives are available from Nursery-Y6. We are also currently implementing the 'Mastering Number' approach in Nur-Y2.

## **Mastering Number Nursery-Y2**

The aim is to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The mastering number program is all about the children being able to understand number at a much deeper level to what they have been used to. Alongside the programme, we are reinforcing the use of manipulatives including rekenreks, Hungarian dice frames and Number blocks. Every Mathematical concept that you can think of can be illustrated and represented by using Numberblocks. All classrooms from Nursery to Y2 will have the Numberblocks on display to reinforce continuity and progression across EY and KS1. The desired outcome is that over time children will leave KS1 with fluency in calculation and a confidence and flexibility with number.

## **Impact**

- Pupils will be able to represent a concept in multiple ways, use the sufficient mathematical language to communicate related ideas and can independently apply the concept to new problems in unfamiliar situations.
- Pupils will have a positive mindset for mathematics and strong subject knowledge so that they can be successful in Mathematics and use this in real life situations.
- Demonstrate a 'can do' attitude to mathematics tasks.
- Through discussion and feedback, children talk enthusiastically about their maths lessons and speak about how they love learning about maths. They can articulate the context in which mathematics is being taught and relate this to real life purposes.
- Pupil's use acquired vocabulary in maths lessons. They have the skills to use methods independently and show resilience when tackling problems