

# Maths at St Augustine's Catholic Primary School

2018 – 2019

The mathematics teaching at St Augustine's Primary School is geared towards enabling each child to develop not only their mathematics skills and understanding required for later life, but also an enthusiasm and fascination about maths itself.

We aim to increase children's confidence in maths so they are able to express themselves and their ideas using the language of maths with assurance.

Pupils at St Augustine's enjoy engaging and challenging Maths lessons using a wide range of resources to suit all learning needs. In the Early years it is taught both discreetly in small groups and when appropriate as a whole class gathering. It is embedded across all areas of learning. In KS1 and KS2 it is taught discreetly. Having said this, cross-curricular links are made to Science, ICT and other curriculum subjects whenever possible.

In EYFS children follow the EYFS Framework and the Development Matters statements. There are 7 areas of learning and the children are working towards the Early Learning Goals in these areas. There is a specific area of learning for maths and within this there are 2 specific strands for maths: numbers and shape, space and measure. The children's mathematical skills are also developed through the characteristics of learning: playing and exploring, active learning and creative and critical thinking.

In KS1 and KS2 we are using the New Primary Curriculum for Maths. In line with the new curriculum, "The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace." Please find below a link to the programmes of study, which outlines the content of the curriculum for each year group, below.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/335158/PRIMARY\\_national\\_curriculum\\_-\\_Mathematics\\_220714.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf)

There are three main aims in the new curriculum for Maths. They are: Fluency, Reasoning and Problem solving.

## Fluency

Pupils at St Augustine's become fluent in using the fundamentals of mathematics in a variety of situations and problems. They are taught to make links between numbers and use this knowledge to assist them in tackling more complex calculations over time. Mental Oral starters at the beginning of each Maths lesson ensure that pupils practise the ability to recall and apply their knowledge rapidly and accurately.

At St Augustine's, we understand that in order for pupils to become fluent in the fundamentals of Maths, they need to have a secure knowledge of their multiplication tables.

We have an online programme called 'Times Table Rockstar'. The children can access this in school and at home. It encourages them to participate in competitions with other pupils in the school. It is fun, challenging and engaging.

Within the new curriculum, the expectations for times tables have changed.

Below is a summary of which times tables and their related division facts pupils need to know by the end of each year.

### **Year 2**

By the end of year 2, pupils should be able to recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.

### **Year 3**

By the end of year 3, pupils should be able to recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

### **Year 4**

By the end of year 4, pupils should be able to recall and use multiplication and division facts for all multiplication tables up to  $12 \times 12$ .

Whilst we teach and practise multiplication tables during Maths lessons, it is also extremely important that your child practises their multiplication and related division facts regularly at home. They are linked to so many areas of Maths, that without a firm knowledge and understanding of them, your child may struggle to access the curriculum for Maths.

### **Teaching Methods and Approaches**

Lessons generally follow a format with a mental and oral starter, a main activity and at least one plenary session to consolidate learning and deal with misconceptions. In Reception the aim is to have prepared the children by the end of the year for a daily 45 minute maths lesson.

The teaching of maths at St Augustine's allows for a range of different learning styles and provides opportunities for –

- Group work
- Paired work
- Whole class teaching

### **Pupils engage in –**

1. The development of mental strategies
2. Written methods and formal jotting
3. Practical work
4. Investigational work
5. Problem – solving
6. Mathematical discussion
7. Consolidation of basic skills and routines

## **Organisation**

In both key stages mathematics lessons are held on a daily basis.

From Year 2 to year 6, pupils are streamed into three maths sets. Within each class, children generally work in groups according to ability. These groupings are flexible and children are moved between them at the teachers' discretion. They are used to ensure that the child is being challenged at their level.

## **Reasoning**

At St Augustine's, we teach pupils to be able to use their knowledge and apply it to a variety of contexts. We encourage them to explain their answers fully to ensure they have really understood the process. Pupils are encouraged to articulate their thoughts and justify and prove their answers using the correct vocabulary.

## **Problem Solving**

Pupils use the number and calculation skills they have learnt to solve a range of problems in different contexts such as: money, measures and time. Children are taught to solve these problems in a logical way alongside their peers.

Every Friday, Maths is dedicated to reasoning and problem solving lessons, usually related to the subject taught during the week.