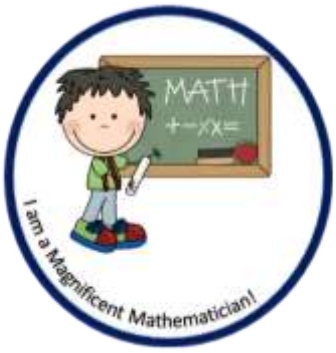

Our Maths Curriculum: Glastonbury Thorn School

At Glastonbury Thorn, we follow a Mastery Approach. Our aim is for all children to develop a deep, long-term, secure, and adaptable understanding of maths. This ensures that children are able to apply their mathematical knowledge to a range of different concepts as well as being able to reason about, and understand the complex relationships within maths. This means that children not only have to 'do' the maths but in order to become fully fluent, must be able to explain their methods and justify what makes an answer correct/incorrect.

Children are introduced to new mathematical concepts through a range of small steps, thus helping to gain a secure understanding without becoming overloaded. Our maths teaching and learning is very practically based. Children are taught to 'see' the maths using a range of manipulatives and as a result, concepts are made very explicit. Our mastery teaching follows a concrete, pictorial and abstract approach, beginning with concrete apparatus, then pictorial representations and finally abstract calculations. Once children have mastered a concept, their learning is then further deepened through challenge activities.

What maths looks like In EYFS

Children are taught the foundations of maths. They are introduced to the number system and begin to understand that each number has its own value. Children learn to sequence numbers through stories and rhymes and begin counting objects, assigning one number name to one object. This develops a sense of cardinality, knowing that the last number said relates to the total number of objects.

Children are encouraged to see numbers within numbers. For example, that five can be made up of two and three or four and one. Through number stories, children are introduced to simple addition and subtraction by combining two sets of objects or taking some objects away from a group. They also learn the concepts of doubling and halving.

Children are also introduced to other mathematical concepts such as shape. They use mathematical terms to describe 2D and 3D shapes and they use these to build models and make patterns.

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.

What maths looks like in KS1

In Year One and Year Two, learning both secures and builds upon children's prior knowledge. Children follow distinct areas. These include:

Number

- Place value
- Addition and subtraction
- Multiplication and division
- Fractions

Measurement

- Time
- Money
- Length and height
- Volume and capacity
- Mass and weight
-

Geometry

- Position and direction
- Properties of shape

Statistics (Year 2)

In Year one children explore the number system further, first with numbers to 20, then 50 and eventually 100. They are introduced to place value and begin to understand that numbers can be ordered in a variety of ways. Children begin to use mathematical symbols to represent addition and subtraction. They build their knowledge of number facts and start to develop a rapid recall of these.

Children learn about equality and begin to find halves and quarters or a shape or quantity. They also develop a greater sense of time, for examples, days of the week and months of the Year. They are taught to read an analogue clock to the hour and half past using all the relevant vocabulary

Children are introduced to an increasing range of shapes and begin to describe these using the correct mathematical terms. They also develop an understanding of a range of measures including, length and height, volume and capacity.

In Year Two children deepen their learning further. They continue to build on their understanding of important mathematical concepts and principles, and how they link together. They use their skills to solve problems whilst explaining their thinking. The focus is on numbers up to 100 and beyond. They learn add and subtract two, 2 digit numbers

using both formal and informal methods. Children become familiar with multiplication and division facts for the 2, 5 and 10's times table, and begin to use this knowledge to solve problems.

Children are introduced to fractions in a variety of different contexts. They begin to use the symbols and learn about the equivalence of ½ and 2/4. They learn to tell and write the time to five minutes including quarter to and quarter past the hour and solve problems involving time.

Children continue their learning about 2D and 3D shapes, describing their properties recognising lines of symmetry and noticing similarities and differences.