



## Statement of Intent for Mathematics

### Intent

At Southbroom Infants' School we want all pupils to develop a curiosity about maths and how it is linked to the world around us. We believe that all children can achieve in mathematics. Our main intention is for children to develop a secure and deep understanding so that they are confident and creative with their application of mathematical skills.

Our intentions in mathematics are for children to:

- Become fluent in the fundamentals of mathematics, especially in number. Pupils are confident at applying their knowledge rapidly and accurately.
- Be able to make links between different mathematical concepts.
- Want to creatively apply maths to practical situations and to challenge themselves mathematically.
- To experience maths when blended in a cross curricular way with a range of other subjects.
- Use mathematical vocabulary with confidence to justify or prove how they have found a solution.
- Recognise that perseverance and resilience are crucial to a pupil's mathematical development. Children will recognise that these values will enhance their own learning in mathematics.

### Implementation

**What do we teach? What does this look like?**

**We strive to achieve the above intentions through two key factors:**

- a) the structure of the maths lesson
- b) the learning environment.

### The Structure of the Maths Lesson

Each lesson will have a focused key learning points (KLP), guided by the national curriculum statements.

Care is taken to divide learning into small 'manageable steps' lesson by lesson.

All children within a class are introduced to the same mathematical concepts at the same time.

The use of misconceptions is key to deepening the children's mathematical understanding. It is used frequently within a lesson.

Maths lessons in KSI use the process of:

### **Teach It- Practice It- Do It- Secure It- Deepen It**

Teach It- introduction of key learning point. Teacher models new learning.

Practice It- children are given the opportunity to safely practice their new skill.

Do It- children practice their new learning independently. This is often done with 5 questions that may increase with difficulty.

Secure It- children are introduced to misconceptions. 'What it's not'. For example, children may be asked to explain why a character may have reached an incorrect answer. Where did they go wrong in applying their new skill?

Deepen It-using the new skill/knowledge to solve a problem. Applying the new skill/knowledge within a different context or new situation. When appropriate lessons will take a 'Do it day' format. This means that the lesson will focus only on the 'Teach it', 'Practice it' and 'Do it' sections. This is to allow children lots of time to play with the new mathematical concept and explore it fully.

### **Cross Curricular Maths**

Opportunities will be provided for children to consolidate their mathematical thinking within other subjects, when appropriate. For example, in geography they may be encouraged to use the language of direction when doing Fieldwork. Mathematics of measurement can be used when measuring rainfall or temperature in the environment in science.

### **KSI Maths Meetings**

Maths meetings are short snappy opportunities (15 minutes) for deliberate practice of previously taught skills. These are also used as an opportunity for catch up interventions on children who might have appeared to have previously seemed insecure in their understanding at the end of the maths lesson earlier on in the day.

### **EYFS Maths Learning**

In EYFS there is the same emphasis on, small, manageable steps, (similar to how maths is taught in KSI).

Each week the children will learn a new number and really understand the relationship between the and the quantity. They will explore that week's new number through adult-led and child-initiated activities. Whole morning sessions will be used throughout the week so that the children can fully explore how to apply that number and how to represent it in different ways.

Children will regularly be made aware and practice subitising as a way of deepening their understanding.

Children with a secure understanding of a number will be encouraged to deepen their understanding by applying it to situations e.g. role-play scenarios. They are encouraged to use their creativity and imagination to practice their mathematical skills.

Whilst formal 'Maths Meetings' are not scheduled in EYFS teaching, teachers and support staff will look out for opportunities to spot digits, subitising of quantities and continuous opportunities to count both forwards and backwards.

## **The Learning Environment**

At Southbroom Infants we recognise that the learning environment is key for improving children's independence in their own learning of mathematics.

All classes will have a "working wall" that will provide uncluttered examples relevant to the current "manageable step" that they are learning. When possible, examples for the working wall will also be provided by the children themselves.

Children will have access to a variety of resources e.g. number lines and 100 squares to assist them with their learning. These may be on their tables, in class drawers or in the inside of their exercise books.

