**Subj****ect: Mathematics**

**Impact: (What will the outcome look like and how will we find out)**

We want children to experience the enjoyment of mathematics and through this

* Are confident to have a go at mathematics
* Understand mistakes happen and have the resilience to have another go
* Have an understanding of the real world and how mathematics is in all aspects of everyday life

Through day-to-day teaching this will be shown and assessments where children are willing to have a go and persevere will show an increasing understanding of the mathematics throughout KS2.

**Implement: (How are we going to do it)**

Our goal is for every child to succeed in Mathematics, to celebrate the journey rather than the destination – the answer is only the beginning. Mistakes and errors are embraced as necessary stepping-stones to Maths mastery. In order that no child is left behind, tasks are set with both a low threshold and a high ceiling; intelligent lesson design enables rapid graspers to immerse themselves in the learning while emerging mastery is nurtured and supported through rapid intervention and the use of manipulatives to consolidate fluency.

The first 15 minutes of each Maths lesson is spent on number work. Broadly, Monday’s focus is addition, Tuesday is subtraction, Wednesday is multiplication and Thursday is division. Friday is a time for the teacher to address an area of number or place value which demands more attention. Our Calculation Policy describes the expected routes of learning through each of the four operations; we encourage a standardised written method but one which is fully understood and not simply driven by process.

We want our children to focus on one key learning point in each lesson. Fluency will be promoted in the **‘Do It’** phase where concepts are addressed in both standard and non-standard ways. A robust approach to reasoning will be developed through the **‘Stretch It’** phase, wherein a child’s mathematical knowledge is enhanced through addressing misconceptions. **‘Deepen It’** allows our children to problem solve in an analytical and methodical way by tackling mathematical questions in a variety of formats and across a range of real life applications, limiting abstraction as much as possible.

Intent: **(What do we want our learners to know)**

We have adopted a mastery approach in order to deliver the three aims of the National Curriculum, fluency, reasoning and problem solving. Underpinning this pedagogy is a belief that all children can succeed in Mathematics. We celebrate the journey rather than the destination – the answer is only the beginning. It means spending time to delve into Maths, rather than rushing through the curriculum: lingering longer to develop a deeper understanding. Mistakes and errors are embraced as necessary stepping-stones to Maths mastery.

Through high quality teaching, planning and subject knowledge, we develop the following essential characteristics of a mathematician:

* Independent mathematicians who are well equipped to apply their learning to the wider world and every day life
* A confidence to tackle mathematical problems, making connections from their learning
* Relating mathematics to other curriculum areas to enable them to use mathematics in all areas of the curriculum confidently
* Celebrating mistakes and having the ability to be resilient, not giving up at the first hurdle
* Fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
* Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts across the curriculum
* Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately