



# St Patrick's Catholic Voluntary Academy Intent, Implementation and Impact Statement – Mathematics:



## Intent:

At St Patrick's Catholic Voluntary Academy, we believe mathematics is an essential skill which teaches us how to make sense of the world around us through developing the ability to calculate, to communicate, to reason and to solve problems. It enables children to understand and appreciate relationships and patterns in both number and space in their every day lives, therefore it is an important part of our broad and balanced curriculum.

We intend to teach a curriculum that allows children to explore skills and knowledge in depth, to gain a secure understanding of subject matter, as well as regularly revisiting these to embed learning. Our concrete, pictorial, manipulatives, abstract approach provides children with a clear structure in which they can further develop and embed their knowledge and understanding of mathematical concepts. We therefore place great emphasis on the use of concrete resources and pictorial representations at all ages, to enable children to fully understand the concepts and principles when presented with abstract calculations and questions. Our aim is to develop a positive culture of deep understanding, confidence and competence in mathematics that produces strong secure learning. Our staff have high expectations and through mathematics encourage a 'can do' attitude to build resilience.

## Implementation:

At St Patrick's Catholic Voluntary Academy, we teach Mathematics using the White Rose Mastery scheme from Foundation Stage 2 to Year 6. Maths lessons are taught daily, set by the whole school non-negotiable timetable, monitored by the Subject Lead and Senior leadership team.

A typical maths lesson includes a clear, concise learning objective. It will include focused mental work and the Mastery principles: The 5 Big Ideas (Representation and structure, Mathematical thinking, Variation, Fluency, Coherence using small steps) with clearly identified learning outcomes and sufficient challenge for all children. Manipulatives are readily available during maths sessions for children to chose or be directed towards to further their understanding of concepts.

In addition to this all children will complete morning maths work which will plug identified gaps and develop the skills covered to ensure a secure understanding of manipulating number and fact fluency.

Children record their work in the agreed age appropriate manner. Foundation Stage record their working in Maths books, in Key Stage 1 (Years 1 and 2) as well as Year 3,

children record their work in White Rose Maths booklets and from Year 4 upwards, children record their work in Maths books. It is also important to record aspects of mathematical investigations and to ensure that children are taught and display knowledge of a variety of methods for recording their work. Children will be supported to use the most appropriate and convenient method of recording.

Assessment is an integral part of learning and teachers participate in live marking within lessons, verbal feedback regularly to individual learners and addressing misconceptions as they arise.

Teachers use short-term assessments as an informal part of every lesson and are closely matched to the teaching objectives. Medium term assessments are carried out every half-term in order to review and record the progress the pupils have made in relation to the Point in Time Assessment Statements (PITA). As well as long term assessments e.g. The optional end of Key Stage 1, Year 2 assessment which take place in June, and the end of Key Stage 2, Year 6 assessments which take place in May (SATs). Children are assessed using end of block assessments from White Rose Maths at the end of every topic covered.

### **Impact:**

By the end of Key Stage 2 our children will be fluent in the essentials of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

They will have the skills to solve problems by applying their mathematics to a variety of situations with increasing complexity, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using Mathematical language.

The impact of our Mastery Maths curriculum and the children's learning is measured in a variety of ways by the Subject Lead and the Senior Leadership Team through a triangulation of activities, which include: lesson observations, photographs, displays, planning scrutinies, book looks, pupil voice, staff voice and expected subject content and progression.