



St. Patrick's Catholic Primary School

Mathematics Curriculum Statement

Intent of the Mathematics curriculum

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. At St Patrick's the mathematics curriculum aims to engage, inspire and challenge all pupils.

The teaching of mathematics enables pupils to:

- become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- solve problems by applying their mathematics to a variety of problems with increasing sophistication
- apply their mathematical knowledge to science and other subjects.

Implementation of the Mathematics curriculum

- At St. Patrick's a spiral curriculum is used so that children experience concepts more than once in an academic year. Unit plans identify a learning journey, required prior knowledge, misconceptions, key vocabulary, and suggested tasks.
- Maths is taught daily with lessons being between 50 minutes – 1 hour in length. Additional opportunities, throughout the week, focus on practising basic skills eg times tables, number bonds and mental calculations.
- Teachers will use their professional judgement to decide how best to deliver the mathematics curriculum within their classroom through whole class, focused group teaching and individual task design.
- Learning will be reviewed at the end of each lesson and used to inform the next step of learning for each child.
- Teachers demonstrate expert modelling and explanations of the mathematical structures using worked examples to support the children's understanding.
- Appropriate models, images, concrete resources, and visual representations are an implicit element in all units Teachers will use these to support their modelling and explanations; children will then demonstrate these in their workings and use this approach to help their problem-solving and reasoning.
- There will be opportunities within lessons and units to review previous learning and ensure children have retained key concepts.
- Key skills, such as number bonds and multiplication tables, will be over-learned until they are securely held within the children's long-term working memory as this will reduce the cognitive overload when solving more complex problems and applying their understanding to other mathematical areas.
- Tasks will be differentiated through adult support and scaffolding to break the learning down into manageable chunks so that children's working memory is not overloaded.
- Links will be made regularly between different mathematical domains.
- There will be opportunities for the pupils to apply their mathematical understanding in other curriculum subjects.
- High-quality mathematical vocabulary is demonstrated and accurately used by the teachers and pupils will be supported to use these in their own work.

Impact

By the time the children leave St Patrick's at the end of Key Stage 2, they will have a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.