

Mathematics

INTENT

At Holy Cross Catholic Primary Academy, we recognise that maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. We aim to promote a love of maths while providing a high-quality mathematics education with a mastery approach so that all children can: become fluent in the fundamentals of mathematics; reason mathematically; solve problems by applying their mathematics.

(National Curriculum 2014)

IMPLEMENTATION

At Holy Cross, teachers plan and deliver lessons or a series of lessons which follow the fluency, problem solving and reasoning model. As a school we subscribe to White Rose Maths and we also use NCETM and NRICH to enhance the provision of maths learning.

Precise questioning is used to test conceptual and procedural knowledge and next steps will be marked in books where appropriate.

Staff know how and when manipulatives will be used within each lesson to scaffold tasks.

We also subscribe to Times Tables Rockstars to provide online support for the children in their learning of multiplication and division facts.

Assessment of learning is used to identify misconceptions and next steps. Assertive mentoring is used to support this.

Tasks and challenge questions are used to challenge children to apply and deepen their learning and mathematical reasoning.

Maths weeks are held to enthuse, inspire and generate a love for maths.

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS profile document. Mathematics development involves providing children with opportunities to practise and improve their skills in counting numbers, calculating simple addition and subtraction problems, and to describe shapes, spaces, and measures. We continually observe and assess children against these areas using their age-related objectives, and plan the next steps in their mathematical development through a topic-based curriculum. There are opportunities for children to encounter Maths throughout the EYFS (both inside and outside) – through both planned activities and the self-selection of easily accessible quality maths resources. Whenever possible children's interests are used to support delivering the maths curriculum.

Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with a more structured approach.

IMPACT

Our maths curriculum is high quality, well thought out and is planned to demonstrate progression.

Maths is planned to provide opportunities, where relevant, for real life maths investigations.

Books have a wide range of activities which show evidence of fluency, reasoning and problem-solving tasks.

Feedback and interventions enable our children to be the best mathematicians they can be.

Children persevere when attempting to solve problems, and choose the equipment and strategies they think are best suited to each problem.

Children are developing skills in being able to reason verbally, pictorially and in written form.

Children who grasp concepts rapidly are challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material consolidate their understanding, including through additional practice, before moving on.

Children at Holy Cross are equipped with mathematical skills and knowledge that will enable them to be ready for the curriculum at Key Stage 3 and for life as an adult in the wider world.