



*Jesus is the centre of our lives,  
Our learning and friendships.  
In a safe, happy and caring community  
Where all are welcome.*

**HOLY CROSS CATHOLIC PRIMARY ACADEMY**

**MATHEMATICS POLICY**

**SEPTEMBER 2022**

**REVIEW JULY 2023**

## INTENT

### Vision

Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will always stay with them.

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Holy Cross Primary Catholic Academy.

The implementation of this policy is the responsibility of all teaching staff.

### Aims and objectives

Our aims of teaching mathematics are:

- To ensure that all pupils become **fluent** in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- To **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language, also through natural curiosity and an investigative approach.
- For children to **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions, also through decision-making and reasoning in a range of contexts.
- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion, ensuring that resources and manipulatives are readily available for the children's use in every lesson.
- To nurture positive attitudes, confidence and competence by adapting the teaching of tasks appropriately to cater for all children's learning needs and styles.
- To consistently emphasize and develop the use of mathematical vocabulary, ensuring that relevant vocabulary is always on display and used.
- To celebrate achievements and provide next steps in the children's learning through high quality oral and written feedback.  
Peer and self assessment are an integral part of this feedback and children are taught the skills needed to effectively do this throughout the school.

- To encourage the children to apply their learning to everyday situations so that children understand the importance of mathematical skills in everyday life and can apply their mathematical skills to other subjects in a cross-curricular approach.

### **Our aims for parents:**

- To be actively involved in their children's mathematical learning both in school and at home.
- To understand and support the school's mathematics and homework policy.
- To be aware of how to support their children at home, using efficient and correct mathematical strategies.

### **IMPLEMENTATION:**

#### **Teaching and learning time**

- Each class teacher will provide adequate time for developing mathematical skills by ensuring that dedicated mathematics lessons take place daily and will last for 60 minutes.
- Children from EYFS - Year 2 will complete the Mastering Number Programme each year which will run x4 times per week in each class to develop number fluency.
- Within lessons, the teachers will plan using the White Rose Hub primarily which promotes the CPA (Concrete, Pictorial, Abstract) method to guide children through their understanding of mathematical processes.
- We ensure that the outdoor environment is incorporated into our lessons, on occasion, to enrich the children's mathematical understanding.
- Cross curricular links will also be made within other subjects so pupils can develop and apply their mathematical skills.
- Homework is set to develop and review children's learning.
- Teachers will make use of formative assessment (White Rose End of Unit Assessments, marking books and Target Tracker statements) to ensure work is adapted to cater for each child's ability.
- Summative assessment is carried out termly - using White Rose Termly Assessments to inform judgements and support future planning.

#### **Resources and outdoor learning**

- Central to our school beliefs is the use of visual and concrete resources to promote understanding. Each class is equipped with a variety of resources to promote understanding of their mathematical work.
- Every class has 'resource boxes' which are stationed in the designated maths area in the classroom and brought to the tables in specific maths lesson for the children to use as they wish.
- These resources will be supplemented with other manipulatives (such as Cuisenaire etc.) which are stored in a centralised area and can be borrowed.
- A number of outdoor learning resources are readily available to enrich the maths curriculum too.

## Planning

- At Holy Cross, we use the White Rose Hub which can be downloaded directly from <https://whiterosemaths.com/>. The White Rose Hub will provide the teachers with the Lesson Objectives, Small Steps and Problem-Solving material to use throughout their lessons and also new end of unit and termly assessments. However, our flexible approach to the teaching of maths allows teachers to freely navigate The White Rose Hub in order to adapt the teaching to the needs of the class which will be based on formative, ongoing assessment. White Rose will provide the objectives but other resources can be used in the lesson to support the children.
- Use of Enrich and NCETM websites are encouraged as these have a wealth of problems that can be used in lesson time. Nrich documents are also on the Staff Drive to help navigate through the variety of resources to find appropriate problems for each unit of learning.
- Teachers will ensure that they comply with the school's planning formats and ensure that planning is sent to phase leaders by Monday morning of each week and a paper copy is handed into the Head Teacher too.
- In the Foundation Stage, teachers use White Rose Hub and Development Matters to plan child led mathematical activities in their indoor and outdoor provision, again using the appropriate planning formats. Teachers must ensure that there are daily Maths lessons taught by adults in group times and focussed activities.

## Assessment

- Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class regularly. We strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, ensuring progress.
- In our school, we continually assess pupils and record their progress, by regularly marking; ensuring that next step marking is evident and acted upon by the children with a red pen. Target Tracker is used to track progress and attainment half termly. Base line assessments are carried out in September too.
- At the beginning of any new unit of work, the White Rose End of Unit Assessment A will be carried out as a 'cold task' to see what the children already know, this will inform planning. This will be repeated, using version B, at the end of the unit to track the progress made.
- During the Summer Term, Years 2 and 6 will complete the compulsory summative SATs tests and in Year 2 this will support the teacher's own assessment. Years 1-

5 will use their own teacher assessment supported by White Rose Hub assessment documents to support their end of year judgements.

- At EYFS, assessment occurs daily through observations using 'Tapestry' which parents can access and see and can also make their own comments too. The teachers also highlight paper copies of the EYFS statements from the curriculum to inform next steps for the children - this information is then collated and an overall grade is given to each child which is put onto Target Tracker half termly.

### **Foundation Stage**

- We teach mathematics in our Reception classes daily following White Rose. As these classes are part of the Foundation Stage of the National Curriculum, we relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five.
- Mathematics in Foundation stage is initially developed through stories, songs, games and imaginative play. A positive approach to maths around the classroom helps the children to begin to relate mathematics to their everyday lives.
- The EYFS learning environment includes visual images, models and number resources to stimulate interest. We give all the children ample opportunity to develop their understanding of number, measurement, pattern, shape and space, through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics. Mathematical resources are readily available both indoors and in the outside learning environment.

### **Inclusion**

We will provide an inclusive curriculum which will meet the needs of all pupils, where the teaching and learning, achievements, attitudes and well being of every learner matters.

All children have equal access to the curriculum regardless of their gender or background. This is monitored by analysing pupil performance and progress throughout school to ensure that there is no disparity between groups.

First Quality Teaching is at the heart of what we provide at Holy Cross and if necessary, teaching is adapted to suit the learners in the class. This is noted quickly and efficiently to ensure that all children achieve their full academic potential, including gifted and talented.

Children with Special Educational Needs are taught within the daily mathematics lesson, their individual needs are strategically planned for and incorporated.

We provide support for those children with English as an additional language, ensuring that where possible mathematical vocabulary is in dual languages to support the needs of specific children.

## **Homework**

The mathematics lessons will provide opportunities for children to practice and consolidate their skills and knowledge, to develop and extend their techniques and strategies, and to prepare for their future learning. These may be extended through home learning. These activities will be short and focused and will be referred to and valued in future lessons.

At Holy Cross from Years 1-6, we use the *CGP* books for maths homework and children are given a maths task each week. Times tables are also set and tested when needed in each class - using Times Table Rockstars.

## **Reporting to Parents**

Parents are given the opportunity to discuss their children's progress at parent evenings, which take place tri-annually. They will also receive regular written reports stating attainment and progress made throughout the year. If a parent has any queries throughout the year they are encouraged to organise a meeting with their child's class teacher.

## **IMPACT**

As a result of our maths teaching at Holy Cross you will see:

- Engaged children who are challenged.
- Confident children who can talk about maths and their learning and the links between mathematical topics.
- Lessons that use a variety of resources to support learning.
- Different representations of mathematical concepts.
- Learning that is tracked and monitored to ensure all children make good progress.

Compiled by Mrs Noonan      SEPTEMBER 2022