

Holy Cross RC Primary School



Mathematics Policy

Signed _____ [Headteacher] Date October 2024

Signed _____ [Chair of Governors] Date October 2024

Next Review Date October 2027

1. PHILOSOPHY

Mathematics is a powerful tool. It equips our children with the skills needed in everyday life and necessary to most forms of employment. A high-quality mathematics education provides a foundation for understanding the world, reasoning mathematically and a sense of enjoyment and curiosity about the subject. It is a subject taught both discretely and in complement with other areas of the curriculum, with these subjects providing rich and meaningful contexts for children to apply their knowledge and understanding of mathematics.

2. AIMS

At Holy Cross we aim to:

- Develop a strong grounding in number so that all children develop the necessary building blocks to excel mathematically.
- Provide frequent and varied opportunities to build and apply mathematical understanding across a range of subjects.
- Help children to contextualise their learning by making links to real-world experiences and applications.
- Include rich opportunities for children to develop their reasoning and problem-solving skills across all areas of mathematics.
- Develop positive attitudes, interests and curiosity in mathematics.
- Provide mathematical opportunities for children to work both independently and collaboratively.

3. LEARNING PROCESS

- Mathematics in Reception follows the Mathematics area of learning in the 'Early Years Foundation Stage Framework'. Planning in Reception is based around the EYFS 'Development Matters' statements. Maths lessons have a strong emphasis on the use of physical resources to support children's progress through play.
- Years 1-6 follow the Mathematics National Curriculum (2014). In Years 1-6 planning for learning is supported by the White Rose schemes of work. It is adapted by individual teachers to suit the needs within their class.
- Classes adopt the teaching for mastery approach. Lessons are broken down into small, connected steps that gradually unfold the concept. A range of representations and concrete manipulatives are used to help develop fluency. Opportunities are also provided to recap on previous areas of learning, for example during maths starters.
- Each class has regular opportunities to secure fluency and problem-solving skills through different tasks. Each lesson involves a fluency aspect and a problem-solving aspect. This may be through the Must/Should/Challenge or as an extension or responding to marking feedback. Each class participates in a weekly 'Figure it Out Friday' session centred around problem-solving skills and the use of sentences stems and high-quality mathematical vocabulary.
- Children are taught through whole-class interactive teaching and are given opportunities to work both independently and collaboratively.
- Weekly plans outline the daily differentiation put in place to meet the needs of every child.
- Maths homework is set once every three weeks.

4. YEAR GROUP AND CLASSROOM ORGANISATION

- Maths is taught in year groups across the school.
- In Years 1-6 the children are seated in mixed ability groups. The class teacher may choose to move them into ability groups for some lessons in order to access support/resources.

- Children can self-select whether to choose the 'must', 'should' or 'challenge' level of differentiation. The children are regularly assessed and will receive guidance about what level of challenge they should choose if necessary.

5. CALCULATORS AND COMPUTERS

- Each class has regular opportunities to use the school laptops and iPads to support their mathematical development. Year 1 and 2 begin by using Numbots to develop their addition and subtraction recall skills. Year's 2-6 have weekly laptop time on 'Times Table Rockstars' which helps to develop their multiplication recall. Year 4 have extra access to Times Tables Rockstars in preparation for the Multiplication Check.
- Numbots is also used as an intervention program for those who are New to English and as a way to assess their number skill.
- Logins for both Numbots and Times Table Rockstars are sent home with the children to enable and encourage use outside of school.
- Calculators are used when appropriate alongside other methods to check calculations.

LINKS WITH OTHER SUBJECTS

- At Holy Cross, children are provided with frequent and varied opportunities to build and apply mathematical reasoning and problem solving across a range of subjects. For example, when carrying out measurements and data handling in Science, when applying mathematical skills to coding in Computing and when carrying out surveys and mapping in Geography.

6. SPECIAL EDUCATIONAL NEEDS

- A 'support' activity is provided for children identified by the SENCO and class teacher as working at a lower year group level. This is outlined in the weekly planning and links to the whole class area of learning where possible. Differentiation is printed on a 'must, should, challenge' sticker and stuck at the top of each piece of work in child-friendly language. The class teacher highlights the level of differentiation met when marking work.
- Additional mathematical support in place to support SEN children includes the use of CGP books from lower year groups to promote independent work, regular access to computer programs such as 'Numbots' to help build number fluency and LSA led maths interventions with individual or small groups of children.

7. EQUAL OPPORTUNITIES

- All children are given equal opportunities to achieve their full potential in mathematics, regardless of gender, ethnic origin, ability and background. A growth mindset attitude is promoted across the school.
- Class teachers adjust the speed and pace of lessons according to the needs of their class. Key vocabulary is displayed on maths boards and maths interventions are put in place for children identified by the SENCO and class teacher. Different teaching approaches are used to meet differing needs. For example, the use of manipulatives or visual resources.
- Where possible, maths is linked to real-world experiences or uses the children's interests to help contextualise learning.

8. ASSESSMENT AND RECORD KEEPING

- Class teachers completely weekly mathematics plans which outline the teaching objectives, lesson activities and differentiation.
- The White Rose scheme of learning provides the basis for each year groups termly maths coverage.
- Maths work is recorded in the children's blue maths books. If children are working on whiteboards or carrying out an investigation then work can be evidenced as photos or pupil voice in the class curriculum floor book. For example, this is often used to record the weekly 'Figure it Out Friday' activities.
- Each class awards a 'Mathematician of the Week' certificate in our weekly celebration assemblies. KS2 children are also awarded with a certificate when they become a 'rock star', 'rock hero' or 'rock legend' on 'Times Table Rockstars'.
- Maths assessment is diagnostic; it is ongoing and helps to inform future planning. It is carried out in several ways:
 - Assessment in EYFS is ongoing linked to the mathematics Early Learning Goals.
 - Children in year's 1-6 are formally assessed on a termly bases using NFER. The results of these assessments are used by class teachers and SLT to monitor the progress of each year group as well as individual children.
- On-going assessment takes place in every lesson through teacher questioning and listening to children. Written work is checked and marked regularly by the class teacher and the outcomes of this are used to inform future planning.
- Written annual reports to parents provide a summary of the child's achievements during the year and details of assessment results.

9. ROLE OF THE CO-ORDINATOR

The subject coordinator will:

- Support the implementation of the Policy for Mathematics and monitor adherence to the Early Years Foundation Stage and the National Curriculum.
- Support staff and children with aspects of implementation.
- Monitor the day-to-day implementation of the Policy.
- Review the Policy in line with the SDP and any new National Initiatives.
- Moderate teachers' assessments.
- Resource the successful running of the curriculum area by managing any budget.
- Attend courses relevant to school, staff and personal needs.
- Inform the Head and Senior Leadership Team of any INSET required.
- Carry out INSET to inform staff of any new developments and initiatives.
- Carry out information events for parents.
- Track data to identify areas for development for individual teacher, cohort or phases; put plans in place to address issues.
- Raise the profile of Maths by organising Maths days, competitions and sponsored events so Maths is seen as a FUN activity.

10. MONITORING

The purpose of Monitoring is to ensure delivery of the National Curriculum and provide support. This is achieved by:

- Tracking data for all children and particular focus groups e.g. PP, gender, EAL, FSM
- Observing learning.
- Scrutiny of Plans.
- Sampling and moderating children's work.
- Pupil voice conferencing.

11. RESOURCES

Years 1-6 follow the White Rose schemes of work, complimented by the 'Classroom Secrets' lesson resources. All classes are equipped with the relevant published materials and resources which can be downloaded from the website subscriptions. Every class has a maths 'Working Wall' which displays current learning, sentence stems and key mathematical vocabulary. Working Walls must be backed with white squared paper. Relevant manipulatives and resources such as number lines, dienes and 100 squares are made available underneath the working wall, allowing children to access them independently.