



Mathematics Policy

Holly Primary School – Mathematics Policy

Aims and Objectives

The national curriculum for mathematics aims to ensure that all pupils: become fluent in the fundamentals of mathematics, including 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. reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language can 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. (New National Curriculum July 2014)

At Holly Primary School the teaching of maths is geared towards enabling each child to develop their learning and achieve their full potential. We endeavour to not only develop the mathematics skills and understanding required for later life, but also to foster an enthusiasm and fascination about maths itself. We aim to increase pupil confidence in maths so they are able to express themselves and their ideas using the language of maths with assurance. We want the children to see mathematics as being relevant to their world and applicable to everyday life as well as being something that they will need as they move on through their school life and ultimately to the world of employment.

Our aim is to ensure that all children:

- Become FLUENT
- REASON and EXPLAIN mathematically
- Can SOLVE PROBLEMS

Children need to be regularly exposed to increasingly complex problems to solve, which allow them to apply their maths knowledge. In doing so they are encouraged to develop an argument and line of enquiry which they can prove.

As children become fluent in the language of mathematics and become increasingly able to reason and explain their thinking mathematically, they become increasingly able to solve problems in a range of contexts, noting connections between areas of maths and proving their answers by using a wide range of mathematical thinking.

Planning and Assessment

Teachers plan and deliver lessons that suit the individual learning styles of the children within their class. Our lessons follow the 'White Rose Maths' elements of teaching and children are given the opportunity to engage in fluency and problem solving activities. An element of reasoning is promoted during each lesson within either the warm-up, main activity or whole class 'deeper thinking' time.

Formal assessments are carried out once a term using the PUMA tests and teachers use these to inform further planning, summative assessments and intervention which will be planned in to fill in gaps in the children's knowledge. Alongside this, White Rose Maths End of Block assessments are used to inform teachers' planning and teaching. In Year 6, past SATs papers are used for assessment to give children the opportunity to practise using the appropriate test format.

Marking

During every lesson, the children are given success criteria identifying the smaller steps to achieve the learning objective. Children carry out their own self-assessment to show how they have found the work during each lesson. The marking of maths follows our whole school marking policy in which teachers give the children a small amount of written feedback which focusses on their 'next steps' in learning. This can take the form of a marking question which promotes reasoning linking to the area of maths we have worked on that day. Children will then be given time to complete this before starting their next lesson.

Calculation Policy

Our Calculation Policy explains the key written methods that need to be taught in each year group, to support the planning, delivery and assessment of learning and teaching in Mathematics and to ensure consistency and progression across the School. All teachers are aware of how the methods for addition, subtraction multiplication and division follow on from each year group to the next to ensure progression from one year to the next.

At Holly Primary School, we have a daily morning focus on arithmetic skills in which children are able to practise mental and formal written methods. In Foundation and Key Stage One, this will include counting and singing songs and in Key Stage Two this takes the form of a set of 5 questions to discuss as a class.

Year 4 Multiplication Tables Check: Times Tables knowledge is at the forefront of our maths teaching as we believe it opens the door to many other essential elements of maths. From Key Stage One, children are given weekly opportunities to practise these skills. All children have access to Times Tables Rockstars to use both at home and at school and their progression is acknowledged in a weekly 'rockband' in our shining star assembly.

Parental Involvement

At Holly Primary School we aim to involve parents/carers in their children's learning as much as possible and to inform them regularly of their child's progress in mathematics. Parents/carers have the opportunity to meet with child's class teacher at least twice a year at Learning Review Meetings and receive written reports three times during the year. We aim to plan and run parent meetings to introduce parents to different calculation strategies, allowing them to effectively support their children at home.

Homework

Children at Holly Primary School are given weekly maths homework to complete which will consolidate and support current classwork. Children will be given several days to complete a piece of homework and there is an expectation that homework will be completed and handed in on time. If children are finding it difficult to complete at home, 'homework club' is run by the class teacher to enable children to access support or time to complete. Children are also expected to log onto Times Table Rockstars as part of their weekly maths homework.

Role of the Maths Subject Leader

- Promote a positivity in the teaching and learning of maths and support teachers where needed.
- Audit provision for mathematics across the school in terms of teaching and learning, resources, standards on a regular basis.
- Write and evaluate a school improvement plan for mathematics and use this to support next years focus.
- Provide maths support meetings for parents to enable them to effectively support their children at home.
- Track progress of identified groups of children throughout the year.
- Attend Maths Network meeting and feedback to SLT.
- Work alongside the SLT to carry out work scrutiny to ensure marking policy is being followed and curriculum coverage is accurate.
- Carry out pupil voice interviews to understand children's feelings about maths and use this to inform future planning.
- Plan and run whole school maths focussed activities throughout the year – Rockstar Day.
- Alongside the SLT, arrange for mathematics INSET training to support teachers knowledge of 'trickier' elements to teach.