



Love, Learn, Respect and Appreciate

Mathematics Policy

2024 – 2025

Mathematics Policy		
Approved by	Board of Governors	November 2024
Next Review due	November 2025	

St. Oswald's Catholic Primary School

Purpose

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and all forms of employment. A high-quality education in mathematics therefore provides 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.

Aims

We aim to ensure that all pupils:

- Become fluent in the fundamentals of mathematics.
- Reason mathematically by following a line of enquiry.
- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the progression of skills at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

Spoken language

Mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. Mathematics vocabulary for each year group is displayed in each class so that pupils are assisted in making their thinking clear to themselves as well as others and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

Early years

Work undertaken within the Foundation Stage is guided by the requirements and recommendations set out in the Early Years 'Development Matters' EYFS document. All children are given ample opportunity to develop their understanding of mathematics. Lessons in the Early Years aim to do this through rich and varied representations and manipulations inside and outside the classroom and is supported using White Rose Maths. This allows children to use, enjoy, explore, practice and talk confidently about mathematics.

School curriculum (KS1 and KS2)

Through the use of our White Rose scheme, we foster children's self-belief in mathematics by promoting each week that we are constantly building our knowledge and skills and making progress. The scheme gives children clear visual manipulations and representations to use and provide reasoning and problem-solving challenges at each learning level. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. Each unit is assessing so we can track their progress and offer support for those who need it.

Planning, learning and teaching: (A typical lesson)

Planning allows for children to begin learning as soon as the lesson starts with mental Maths activities to warm them up before encountering the review stage. Teachers use White Rose Maths to provide exemplification for objectives, which are broken down into fluency, reasoning and problem solving for each stage. Lessons will then include appropriate knowledge, reasoning and problem-solving activities, all of which will have a purpose- a real life connection and a reason for learning- including, where necessary, the outside environment. Mini plenaries will be planned for and implemented throughout the lessons to ensure and develop children's understanding further and allow for the progression through activities to develop at the appropriate pace for each individual child. Final plenaries will be planned for and used effectively to consolidate, assess and take learning forward.

- Questioning is the key to success in all our mathematics sessions and questions will be continuously adapted by the teacher and support staff based on assessment for learning to provide appropriate challenge.
- Mental Maths should be incorporated throughout all lessons and mental strategies for solving all mathematical concepts will be discussed and developed based on continuous assessment for learning.
- Use of teaching assistant support is planned for in every part of the mathematics lesson to ensure they are used effectively in supporting, developing and assessing pupil progress throughout. Regular training opportunities are given to keep them fully updated and develop their skills further.

Progression of calculation methods

We have a policy for progression in calculation methods to ensure continuity and consistency throughout the school.

Teaching mathematics to children with SEN

Through our mathematics teaching, we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges, adapting tasks and responding to each child's different needs. Our assessment process looks at a range of factors such as teaching materials, teaching styles teaching support and adaptation – so that we can take some additional or different actions to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs. Intervention through SEND Support will lead to the creation of an individual Education Plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to mathematics and is incorporated into all mathematics lessons.

Marking

The main purpose of our marking policy is to ensure that as children progress through the school they benefit from constructive guidance and next steps to challenge and consolidate their learning further. Each key stage has a clear marking scheme, which is shared with the children verbally and is shown on the cover of each of their work books.

Assessment

Continuous assessment is regarded as an integral part of teaching and learning and is an on-going process. It is the responsibility of the class teacher to assess all pupils in their class. This is achieved through verbal feedback during the lesson, mini-plenaries, questioning, marking and pupil self-assessment (happy, okay or sad faces drawn in the top left-hand corner of their work) and next steps. Each White Rose unit is assessed and these results are collated using our Insight data program. For year 4, a Multiplication Tables Check (MTC) is scheduled each June. Year 2 and year 6 are also given statutory Sat's in mathematics to measure progress against the National Curriculum objectives.

Resources

There is a wide range of resource to support the teaching of mathematics across the school. Equipment is stored in a central resource area. Resources are audited each year and any new equipment is purchased when necessary.

Date of Policy: October 2024

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