

Maths



Intent

Our intent in Maths is for children to experience a high-quality Maths education that provides a foundation for understanding the world and a genuine interest and curiosity about Mathematics. Our aim is that children develop a deep understanding and knowledge of number sense and become fluent in the fundamentals of Mathematics. We want our children to develop their conceptual understanding and develop the ability to recall and apply their knowledge accurately. We also want children to be able to reason mathematically by following a line of enquiry, look for relationships and make generalisations.

Our aim is for children to gain procedural knowledge through enriching experiences. Over the past few years we have implemented a 'Teaching for Mastery' approach and we believe that everyone, no matter what their starting point is, can learn and improve at Maths. All children will be encouraged to believe that by working hard, persevering and adopting a growth mind set approach to mathematics, including seeing the value of making mistakes and of learning from them, they can succeed in maths.

Our intent is to meet the statutory requirements as specified in the National Curriculum. Maths lessons are taught through our chosen scheme of learning, White Rose Maths, which is carefully ordered to build upon prior learning in small, manageable steps.

Our curriculum is designed to support the development of reasoning and problem solving alongside fluency to ensure challenge and ambition for all children. More time is spent on each area in order to enrich and embed ideas, enabling children to make connections. Children who grasp concepts rapidly are challenged through being offered challenging problems and tasks that further deepen their understanding. Lessons will be adapted for children when needed.

Key learning points are identified during planning and a clear journey through maths is evident in lessons. Questions and discussions will probe children's understanding throughout and children will be assisted in explaining their thinking, using precise mathematical language and using full sentences to develop an argument, justification or proof. Misconceptions are identified during the planning process and during lessons and used as opportunities for learning.

The use of practical resources, pictorial representations and recording takes place.

We aim to develop all aspects of fluency through lessons. As a school, we are focusing on developing instant recall of key facts, such as number bonds, multiplication and addition facts. Increasing fluency in basic facts allows children to free working memory and to solve more complex problems. In order to support the development of our intent, the maths leads will use their knowledge which has been gained, developed and enhanced from working alongside the local Maths Hub.

We believe Maths to be important in preparing children for the future in terms of life skills and career opportunities. Children will see maths across the curriculum and will develop and apply their skills in different contexts.

Implementation

At Larchfield, Maths is delivered daily during the hourly Maths lesson. The Maths subject coordinator oversees and leads the subject by monitoring, evaluating and sharing good practise. Our curriculum overview shows the order in which topics are taught across the year groups. These lessons cover the National Curriculum objectives, broken down into small steps. Lessons are adapted and sometimes plans are put in place for children identified as needing additional support.

Additionally, number fact fluency is practiced regularly through activities such as our times tables scheme of learning, Times Tables Rockstars, Numbots, daily arithmetic practice and targeted interventions which are delivered by the teaching assistants or the class teacher. Opportunities for cross curricular maths are regularly identified and planned for in other subjects such as Science, Art, DT and Geography.

Children are formally tested each term, using the White Rose Assessments. Gap analysis informs future planning.

In EYFS the `Statutory Framework for the Early Years Foundation Stage` and the non-statutory guidance of `Development Matters` provides the long-term planning in EYFS. To support further with their planning teachers have access to the White Rose Maths Early Years resources to support teachers with their lesson planning.

Impact

Children talk enthusiastically about their Maths and this is evident in the conversations they have with teachers and with each other. The opportunities for discussion, engagement in talk and questioning allow teachers to quickly ascertain the children's level of understanding and provide further guidance as necessary. Much of the children's work is marked live giving children instant feedback on their efforts in order to further their learning.

To measure progress, teachers integrate a combination of formative assessment (gathered during discussions, questioning, resourced activities, paired and independent tasks) and summative assessment carried out at the end of each block. Statements are updated on OTrack and this is used to inform half termly assessment and to identify gaps. Pupil progress meetings are held to review each child's progress and next best steps.

Children with significant gaps might have individual targets identified on their SEND Support Plans and taken for additional intervention. Where necessary and possible, intervention is provided as quickly as possible to help maintain the intention that the whole class is working together.

External assessments take place in the form of End of Key Stage 2 SATs and the Year 4 Multiplication Tables Check. Although our intent is to enable learners to develop deeper mathematical understanding, these assessments are an important measure of the impact of the teaching and learning at our school.