

Curriculum Vision Statement: Mathematics

At Lambley, we value and nurture every child as an individual; as someone who's uniqueness, interests and passions are supported and celebrated. We are a family who learn together, care for one another and make the most of every opportunity. Through our positive attitude, our growing confidence and determination to do our best, all children thrive and are ready to make their mark on the world. We are proud to say that when children leave us, they are ready for 'Life beyond Lambley.

<u>Intent</u>

The basic skills of mathematics are vital for the life opportunities of our children. Our aim is for all children to think mathematically, enabling them to reason, solve problems and assess risk in a range of contexts.

At Lambley Primary School, our Mathematics Mastery curriculum has been developed to ensure every child can achieve excellence in mathematics. Children can experience a sense of achievement and pride as they solve a problem for the first time, discover different solutions and make links between different areas of mathematics. It provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures pupils fully understand what they are learning.

Aims

- To implement the current legal requirements of the Foundation Stage (FS) and the National Curriculum (NC).
- To foster positive attitudes, fascination and excitement of discovery through the teaching and learning of mathematical concepts.
- To ensure pupils become fluent in the fundamentals of mathematics, developing conceptual knowledge and an ability to recall and apply knowledge rapidly and accurately
- To ensure that pupils can reason mathematically and solve problems
- For our children to develop a 'can do' attitude and perceive themselves as mathematicians.
- To broaden children's knowledge and understanding of how mathematics is used in the wider world.
- For our children to use and understand mathematical language and recognise its importance as a language for communication and thinking.

Implementation

Planning

At Lambley, we use the White Rose Mathematics Hubs resources to support us in our planning.

- Long term plans map out the units to be covered each term, during each Key Stage.
- Medium term plans identify learning objectives and outcomes for each unit, as well as indicating the skills being taught.
- Short term plans highlight the skills and objectives of the lesson, a range of questions and images to challenge the children and a series of small steps to help the children to achieve the objective.

Fluency in Number (including Times Tables) Scheme

Effective understanding and recall of number bonds and times tables is the foundation of most of the mathematics children will do at primary school and the mathematics curriculum requires children to



Curriculum Vision Statement: Mathematics

be fluent in number skills. Our number bonds and times tables scheme is based on the time and knowledge requirements of the Year 4 Multiplication Check but also includes inverse operations, a range of representations and problem solving, particularly in the higher level tests. The children are tested weekly and our challenge is linked to beating superheroes which engages and enthuses the children.

Assessment

In Mathematics Mastery assessment is continuous. From the beginning of every lesson, teachers and teaching assistants will be assessing what their pupils are, or are not understanding and use this to scaffold each segment of the lesson. Interventions will be both planned for and 'live', meaning that misconceptions are dealt with immediately and high attaining pupils are challenged appropriately. Pre and post teaching (weekly, or using recaps in lesson time) ensures that all children can achieve and are prepared for subsequent sequences of lessons.

EYFS

Teachers and teaching assistants in the Foundation Stage make observational assessments early in Autumn Term 1 to ascertain a baseline which then informs subsequent teaching and learning for each child. Future attainment is noted using photographs and observational notes. Progress is recorded in each child's Learning Journey and the next steps to be taken are identified. Progress is then monitored termly. Statutory assessments are made on entry and on exit of the Foundation Stage.

KS1 and KS2

In the daily mathematics lesson, formative assessments are made on a day-to-day basis. Practitioners observe, question and evaluate lesson outcomes to further determine progress made and the next steps in learning. Assessments take place at the end of each unit of work to allow further intervention for children who need more time on a particular concept. Summative assessments are made at the end of each term to monitor children's knowledge and understanding of concepts taught. White Rose Mathematics Hub tests are used in all year groups from 1 – 6 although year 2 and 6 teachers may also use past SATs papers in Autumn and Spring term. Progress is discussed at termly 'Pupil Progress Meetings' and focus children are indicated. Statutory assessments are made at the end of each key stage.

Reading across the curriculum:

Reading in mathematics is vital for children to understand different concepts and apply it to their understanding of the world. Children will be exposed to mathematical vocabulary on a daily basis to allow them to recognise and use the correct mathematical terms, which they are expected to employ when explaining ideas and answers. In addition, children will be expected to read numbers written as words and other important vocabulary, such as hundreds, tens, ones, half, equal, add, subtract and so on. In daily lessons, children are exposed to problems written in words and it is critical that they use the reading skills they have learnt to read for meaning and decipher unfamiliar words, in order to solve problems successfully.

<u>Impact</u>

Key features of our Maths Mastery curriculum:

- · High expectations for every child
- Fewer topics, greater depth



Curriculum Vision Statement: Mathematics

- Number sense and place value come first
- Focus on mathematical thinking and language
- Resources to support
- Problem solving in different contexts is central
- Calculate with confidence
 understand why it works

Mathematics Mastery places emphasis on the cumulative mastery of essential knowledge and skills in mathematics. It embeds a deeper understanding of maths by utilising a concrete, pictorial, abstract approach so that pupils understand what they are doing rather than just learning to repeat routines without grasping what is happening.