



National Curriculum Aims

The 2014 National Curriculum for Maths 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.

Intent	Implementation	Impact
At West Lodge we believe the teaching of maths is essential to everyday life. The mathematics curriculum is planned in a sequenced way to build knowledge, skills, understanding and mathematical vocabulary from Early Years to Year 6. We want children to become confident mathematicians who are not afraid to take risks. We teach a high quality maths curriculum that is both challenging for all and allows children to develop a sense of enjoyment and curiosity for the subject. Arithmetic and basic maths skills are practised weekly to ensure mathematics concepts are embedded.	Our curriculum for mathematics ensures children develop a deep and secure understanding of mathematics. Teachers plan using a variety of resources, as we believe that we provide a bespoke teaching and learning experience that is designed to interest, inform and inspire our children. Daily maths lessons include fluency, reasoning and problem solving for all learners. Concrete manipulatives and pictorial representations are used to support conceptual understanding and to help children make links across topics. Review lessons are used to revisit previous learning and ensure Maths skills are embedded. The school's Calculations Policy provides a guide to how calculations using the four rules of number should be taught within each group.	The impact of teaching and learning will be measured through a range of assessment and observational tools which includes: • On-going teacher assessment • Twice yearly standardised tests (Termly for Year 2 and Year 6) • End of Key Stage assessments • Multiplication Tables Checking Exercise (Year 4) • Post learning reviews for a specific blocks of work

Knowledge and Skills

As pupils progress they will develop their skills and understanding of the different areas of mathematics, which will enable children to develop a deep understanding of concepts so they become fluent and are able solve increasing more complex problems with accuracy. These areas are:

- Block A: Number (Place Value)
- Block B: Number (Four Operations)
- Block C: Fractions, decimals, percentages, ratios and proportion
- Block D: Position and direction, properties of shape
- Block E: Handling data, algebra and measures

In Early Years foundation stage these are:

- Number (Block A, Block B and Block C)
- Shape, Space and Measure (Block D and E)

An effective curriculum for Mathematics will promote:

- Children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

Creativity

Our curriculum enables pupils to make sense of the world around them and we strive to enable each of our pupils to explore the connections between their numeracy skills and every-day life. Developing deep thinking and an ability to question the way in which the world works promotes creativity in children

Problem solving skills and teamwork are fundamental to mathematics through creative thinking, discussion, explaining and presenting ideas. Pupils are always encouraged to explain concepts to each other and support each other in their learning. Children will show their thinking through visuals, jottings and multiple representations when problem solving. Thus, pupils realise their own strengths and feel a sense of achievement which often boosts confidence. Over time, they become more independent and resilient learners.

Assessment

At West Lodge assessment is an integral part of teaching and learning and is a continuous process. Teachers make assessments through:

- regular marking of work.
- analysing errors and picking up on misconceptions.
- asking questions and listening to answers.
- facilitating and listening to discussions.
- making observations.
- post learning reviews for a specific blocks of work
- twice yearly assessments using the NTS assessment tests.

In Early Years, assessment happens continually to collect consistent and varied evidence. This then feeds into the continuous cycle of Observation, Assessment and Planning.