



Maths at Lower Heath CE Primary School

Intent	
Our maths philosophy is...	<p>We incorporate the key principles of teaching for mastery and the work of Rosenshine, to ensure that children can use mathematical skills and knowledge confidently in a range of different contexts. We are committed to ensuring that children recognise the importance of maths in the wider world.</p> <p>At Lower Heath, we believe that decisions about when to progress should always be based on the security of pupils' understanding. Pupils who grasp concepts rapidly should be challenged through sophisticated problems, before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding.</p>
Implementation	
The curriculum is designed using...	<p>The aims of the National Curriculum - developing fluency, reasoning and problem solving skills.</p> <p>Statutory requirements of National Curriculum expectations for each year group.</p> <p>Principles of Maths Mastery - especially the '5 big ideas': Coherence, Representation and Structure, Mathematical Thinking, Fluency and Variation.</p> <p>Long and medium term planning using White Rose materials.</p>
Our approach to maths mastery is...	<p>Outlined in curriculum design, challenge, progression, reviewing, feedback and assessment sections of this document.</p> <p>Single-age group teaching where possible.</p>
Learning is progressive, it builds on previous years by...	<p>Using long term plans to sequence order of units.</p> <p>Using Government Progression guidance.</p> <p>Using medium and short term planning sequences to ensure learning builds on each previous learning.</p> <p>Using small steps progression and lesson by lesson overviews.</p>
There is sufficient challenge for all pupils provided by...	<p>Careful identification of 'journey' of learning throughout each unit.</p> <p>All staff aware of how to develop depth of learning in each unit through using NCETM assessment materials, NCETM PD Materials, White Rose Schemes, I see Maths resources.</p> <p>Instant and relevant feedback in lessons.</p> <p>Rapid intervention for all pupils to develop depth of understanding.</p>
We check that children are remembering previous and new content by...	<p>Presenting new material in small steps in whole-class/year group interactive teaching.</p> <p>Using high quality questioning to help develop and check for understanding.</p> <p>Building in regular review sessions in lessons and planning discrete review lessons (spaced practice).</p> <p>Daily morning maths recall for all children.</p>
Children have regular opportunities to use problem-solving and reasoning skills, through...	<p>Use of high quality teaching resources such as 'I see Problem Solving'.</p> <p>Lessons planned so that problem solving is built into regular daily lessons rather than just 'one off' problem solving activities.</p>
Children receive feedback by...	<p>Teachers giving oral feedback in lessons as lesson progresses to respond to misconceptions rapidly and give moving forward feedback.</p> <p>Checks of children's work after lessons so that rapid feedback can be given as soon as possible on an individual basis.</p> <p>Teachers giving whole class feedback from areas identified in previous lesson</p> <p>Peer feedback from other pupils.</p>

	Self-marking where appropriate so children can identify and correct errors in own work.
Formative assessment is used to inform next steps by...	Adapting sessions as children progress within lessons and lesson by lesson. Responding to misconceptions through rapid intervention.
The following summative assessment is used in maths...	<ul style="list-style-type: none"> ○ Past SATS for Year 2 and Year 6 ○ PUMA online tests for Years 1-6
Vulnerable groups (including the lowest 20%) are supported through...	<ul style="list-style-type: none"> ○ Targeted support in lessons ○ Pre teaching of new concepts ○ Rapid intervention
This subject is monitored though...	Scheduled maths monitoring sessions; with feedback being used to further improve practice. These sessions involve book scrutinies, learn walks, pupil voice and analysis of data. Coaching sessions are offered and delivered for less experienced staff.
Staff development in this subject is supported by...	Regular staff training in staff meetings e.g. following a mastery approach. Team teaching and lesson study to develop particular areas of pedagogy. Participation in local initiatives such as the Maths Mastery Work Groups run by the Local Maths Hub. Use of professional development materials - particularly those published by NCETM. Coaching sessions for less experienced members of staff. Maths support network group attended half-termly by JHW, with relevant information and useful ideas being shared with other staff.
Impact	
In maths books, you will see...	A clear learning objective and relevant success criteria for each lesson. A good balance of reasoning, problem solving and fluency work. Progressively more independent recording as children progress through school. By Year 5 and 6, most recording should be done in books - not on worksheets. Evidence of progress throughout a unit. Evidence of children taking pride in their work and pride in the presentation of their books.
What is the impact of our maths curriculum?	Children will make at least good progress in maths from their last point of statutory assessment. Children will use their mathematical knowledge and skills, in all curriculum areas, to enable them to know more, remember more and understand more. By the end of KS2, a high proportion of our pupils are fluent in the fundamentals of mathematics. They show the ability to recall and apply knowledge rapidly and accurately. They have the skills to solve problems by applying their mathematics to a variety of situations.