



# Maths Curriculum

**Motto: Learning, Achieving, Aspiring Together.**



## Intent, Implementation and Impact

Intent	Implementation	Impact
<p>At Lake Farm Park Academy we believe that maths is best learnt through the children having a deep, conceptual understanding of a range of mathematical ideas.</p> <p>Our aim is to challenge the pupils to make rich connections across distinct mathematical domains and to use their strong factual and procedural knowledge to help solve problems. As they deepen their understanding of mathematical concepts, they will be able to explain the reasoning behind their lines of enquiry, using accurate mathematical vocabulary.</p> <p>To achieve this, we use a range of initiatives, manipulatives and schemes to develop mastery within our pupils.</p> <p>Through this we prepare pupils to enter the next phase of their life as they develop a love of maths and make connections to the wider world drawing on links to other areas of their learning.</p>	<p>Our maths teaching across the school places emphasis upon a mastery approach. This approach seeks to build flexible learners with a depth of understanding that allows them to access a range of problems that are presented in a variety of formats. We use White Rose supplemented by NCTM to deliver the 2014 National Curriculum objectives for Primary maths.</p> <p><b>The principles and features that characterise our approach are:</b></p> <p>An expectation that all children are capable of achieving high standards in maths.</p> <ul style="list-style-type: none"> <li>➤ The large majority of children progress through the curriculum content at the same pace.</li> <li>➤ Differentiation is achieved by emphasising deep knowledge, extension activities and through individual support and intervention.</li> <li>➤ Teaching is supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.</li> <li>➤ Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.</li> <li>➤ Teachers use precise questioning in class and assess children regularly to identify those requiring intervention so that all children keep up.</li> </ul> <p><b><u>Lesson approach and teaching methods:</u></b></p> <p>In order to develop mastery, maths teaching at LFPA utilises the CPA (concrete, pictorial and abstract) approach. When introducing new concepts children are given the opportunity to use concrete objects to model problems. This then moves on to children being able to represent these objects pictorially which encourages them to make a mental connection between the physical object and abstract levels of understanding. Finally, children are then able to understand and represent mathematical concepts in an abstract way where symbols are then used to model problems. These three stages however are not linear. Teachers will often go back and forth between each representation or model them alongside each other to reinforce concepts.</p>	<p>Maths lessons are engaging and well-resourced with the pupils acknowledging that the journey to finding an answer is most important factor. Our children are resilient and they make measurable progress against the National Curriculum objectives.</p> <p>Children are keen to attempt a range of problems and choose the equipment they need to help them to learn, along with the strategies they think are best suited to each scenario.</p> <p>Children are developing skills in being articulate and are able to reason verbally, pictorially and in written form. Well-planned sequences of learning support pupils to develop and refine their maths skills. Children are able to independently apply their knowledge to a range of increasingly complex problems.</p>