

At Dale Hall Community School, we are committed to providing our children with a curriculum that inspires.

Curriculum statement for the teaching and learning of Maths 2021/2022

*Maths should be far more than just arithmetic and calculation skills, important as these are. It is a creative and highly interconnected subject that has developed over centuries. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and in most forms of employment. It has clear links to **all** other areas of the curriculum, something we will seek to draw children's attention to.. Most importantly we want children at Dale Hall to develop an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject.*

Aim	At Dale Hall children will develop secure conceptual understanding of the subject by being introduced to new ideas through the use of concrete materials (for example Numicon, base ten equipment and place value counters) and will then develop their understanding through the use of pictorial images (such as bar models). We will help them to develop the ability to recall and apply their knowledge rapidly and accurately, encouraging them to make connections between different aspects of the subject. We want our pupils to develop the ability to reason mathematically, to make their own conjectures and generalisations - using mathematical language accurately to explain their thinking, to tackle a wide range of rich and varied problems and to persevere when faced with more challenging tasks.			
Intent	High Expectations	Modelling and Collaborative Work	Fluency	Vocabulary
	All children should be able to access and enjoy maths lessons and develop their skills as they move through the school. Children are encouraged to take risks and teachers develop high expectations through discussion and encouragement.	Teachers teach and model the skills needed to succeed in maths providing examples of good practice and having high expectations. Pupils will often work with partners or in a small group; working collaboratively to reason about the subject and to increasingly make their own conjectures from what they have noticed.	Children will develop fluency in the fundamentals of mathematics through varied and frequent practice with increasingly complex problems over time, so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.	It is essential that children are encouraged to always use the correct vocabulary when discussing or reasoning about their maths work - for example 'multiplied by' rather than 'times'. They also need to realise that many everyday words have different meanings in maths.

Implementation	Enrichment	CPD	Planning
	<p>Children will be encouraged to apply the skills taught in their maths lessons and to see links to the subject throughout the curriculum. For example interpreting and presenting data in science, looking for patterns in art and music, investigating the different counting systems of the Romans and Mayans in history and exploring the place of art in religions.</p>	<p>Through a skills survey we identify the level of knowledge and support needed. CPD is then matched to each teacher's individual needs. We work closely with our local maths hub (Angles) to provide support to teachers and support staff at all stages of their careers and all levels of confidence. In house CPD is also regularly delivered by the maths lead.</p>	<p>The majority of our lessons are based around White Rose Maths - a 'mastery' based programme of study which makes explicit the small steps required to build conceptual fluency for all children. Numicon plans and resources are also regularly integrated, especially for new concepts. We also draw on the resources of other well established and respected organisations (e.g. NRICH) to provide opportunities for extended investigations.</p>
Impact	Assessment	CPA	Cultural diversity and equality
	<p>Children complete weekly CLIC tests to enable them to practise and keep fresh previously learnt skills. At the end of each unit children will attempt the White Rose assessment. At the end of each term, PUMA tests are taken. All of the above are used by class teachers to identify individual and common misconceptions and to inform future planning.</p>	<p>Mathematical concepts will introduced, reinforced and developed using a 'Concrete Pictorial Abstract' (CPA) approach. This approach builds on children's existing knowledge by introducing abstract concepts in a concrete and tangible way. It involves moving from concrete materials, to pictorial representations, to abstract symbols and problems.</p>	<p>Our maths curriculum is accessible to all of our pupils and enables them to learn at their own level or ability. We will look at the role of maths in different historical periods and cultures and also within religious contexts, for example the use of repeating pattern, symmetry and tessellations in Islamic art.</p>

