



# Maths

## Intent, Implementation, Impact:

Intent	Implementation	Impact
<ul style="list-style-type: none"> <li>• develop confidence and competence with numbers and the number system</li> <li>• promote enjoyment and enthusiasm for Maths through practical activity, exploration and discussion.</li> <li>• explore features of shape and space, and develop measuring skills in a range of contexts</li> <li>• equip learners with the language and skills to communicate their mathematical ideas</li> <li>• understand the importance of Maths in everyday life and apply mathematical skills in a meaningful way</li> <li>• maximise opportunities to practise Mathematical skills in a range of real-life contexts</li> <li>• improve learners' ability to solve problems through decision-making and reasoning in a range of contexts</li> <li>• provide appropriate accreditation and opportunities for life beyond school</li> </ul>	<ul style="list-style-type: none"> <li>• Mastery approach to teaching mathematics</li> <li>• Through the use of the White Rose Maths scheme (up to year 11) we use a 'hands on' approach using real objects and it is our foundation to develop conceptual understanding</li> <li>• Once these experiences have been embedded, pictorial representation is introduced. In this stage, learners relate their previous understanding to diagrams and pictures of mathematical concepts</li> <li>• When the pictorial stage has been mastered, learners begin to represent their ideas in an abstract way using mathematical notation and symbols</li> <li>• In post 16 Maths is set within a truly functional context - Time, Measurement, Shape and Money are all taught in multiple contexts</li> <li>• Daily maths lessons / opportunities for learning</li> <li>• Key numeracy skills with a small steps approach taught and revisited regularly</li> <li>• A kinaesthetic and nurturing approach with a strong focus on core number skills is embedded throughout and revisited regularly for all learners</li> <li>• Real world examples used and modelled</li> <li>• Provide frequent and varied opportunities to build and apply understanding - such as using stimulating resources and manipulatives, including small objects for organising counting</li> <li>• Offer repeated experiences with the counting sequence in meaningful and varied contexts, outside and indoors. Suggestions: count fingers and toes, stairs, toys, food items, sounds and actions.</li> <li>• Repetitive and reinforced learning and vocabulary for example, big, small, more, little, lots etc</li> <li>• Regular access to developmentally appropriate activities that will support motor planning eg. filling and emptying in the water tray could support understanding of how to pour their own drink</li> <li>• Access to Visual Timetables so support understanding of structure and routines of daily activities; now and next</li> <li>• Use of Numicon to develop spatial awareness of number relationships</li> <li>• Small steps approach to learning and a strong emphasis on mastering a skill before moving forwards and constant revisiting to help with retention of maths skills.</li> <li>• Opportunities throughout their maths curriculum to reason, problem solve and apply their knowledge in other strands of Mathematics and in practical situations (Life Skills)</li> <li>• Focus on key questioning to deepen understanding and highlight misconceptions early</li> <li>• Differentiated starters linked to over learning and reinforcing key numeracy and calculator skills</li> <li>• Use of concrete, and pictorial resources to scaffold learners and introduce new topics- explicitly taught</li> <li>• Multi representational mathematics taught to help learners find their preferred method, problem solve and reason at their level</li> <li>• Use of concrete, and pictorial resources to scaffold learners and introduce new topics- explicitly taught</li> <li>• Key areas of mathematics such as time and money are regularly revisited and reinforced - allocated disproportionate amounts of time</li> <li>• Maths embedded into the school day enables learning to occur in multiple contexts to support developing transferrable skills (Home Management Units, In the community, work related learning, life skills lessons, kitchen) and as such all learning opportunities are exploited for practice and reinforcement - such as the use of measurement, reading numbers, temperature, handling money, managing change, counting out snack items when giving snack to learners etc.</li> <li>• Enterprise Fairs: (Counting money, taking money, counting and reading numbers)</li> <li>• Life skills trips provide opportunities to practise and develop functional Mathematical learning</li> <li>• Revisit fundamental ideas repeatedly, building cumulatively and making links and connections between them until the learner has grasped full understanding (Bruner spiral curriculum principles)</li> <li>• Use of ICT and on-line learning platforms in school and at home such as Number Seeds, Sum Dog, Timetable Rockstars, Prodigy, Mathletics and Education City</li> <li>• AFL, whiteboard use and live marking embedded in all Maths lessons to address learners' competencies throughout the lesson and direct support accordingly.</li> <li>• All Key stages are assessed using the West SILC assessment documents.</li> <li>• Lessons and teaching are personalised to match learners' individual needs including targeted intervention, in order for them to progress effectively.</li> <li>• Learners' Maths outcomes are threaded across their EHCP and evidence and intervention to meet these is incorporated in their maths lesson</li> </ul>	<p><b>Learners:</b></p> <ul style="list-style-type: none"> <li>• develop confidence and competence with numbers and the number system</li> <li>• understand place value, addition and subtraction, multiplication and division, fractions and ratios</li> <li>• can transfer learned skills and use them in a functional way; for example, when using money and measures</li> <li>• develop a sense of shape and space</li> <li>• are able to use measuring skills in a range of contexts</li> <li>• understand the properties of shape and using position and direction</li> <li>• are able to understand and interpret data in different ways for example, sorting, collecting data and creating graphs</li> <li>• can interpret data in different contexts, for example using a bus timetable</li> </ul>