

Mathematics Policy 2021-2022

Mrs Heald

Mission Nurturing ambition through a living faith.

Vision Our academy delivers a purposeful curriculum through its living Christian faith. We nurture ambition in all our learners in order for them to become positive citizens of tomorrow.

Introduction The following policy reflects our values and philosophy in relation to the provision and teaching of mathematics at Darwen St. James' to produce children with mathematical fluency, children who confidently and successfully undertake mathematical activities both in the classroom and the world beyond.

Policy Statement Children that have mathematical fluency are confidently able to apply their mathematical knowledge and skills both at school and in their daily lives. Throughout the school mathematics is brought to life through high quality teaching, inspiration learning activities and planning that considers the interests and motivations of children. When possible, practical opportunities, using models and real life situations are incorporated. This will support and increase all children's access to excellent teaching, leading to exciting and successful learning.

Aims and purposes of mathematics Mathematics teaching should contribute to the acquisition of life-long skills and promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion. Through our provision we aim that children:

- will be able to apply their mathematical knowledge to solve problems, including those with real-life contexts, by choosing the appropriate operations
- can estimate the approximate size of the answer to check the reasonableness of their calculations
- will leave primary school with an efficient, reliable, compact written method of calculation for each operation
- develop a range of mental calculation strategies, aided by informal jottings where necessary
- are confident in the fundamentals of maths and be able to reason mathematically
- understand the importance of mathematical skills in everyday life.

Achieving and maintaining high standards. Staff at Darwen St. James' are part of a

maths mastery hub. The hub works together with schools to support the continuous improvement of mathematics education for all children and further develop staff's subject knowledge.

Planning Staff from Reception to Year 6 base their teaching on Power Maths which is a UK curriculum mastery programme, approved by the DfE. It is built around a child-centred lesson design that models and embeds a growth mindset approach to maths and focuses on helping all children to build a deep understanding of maths concepts. The NCETM mastery materials are also used to further staff's professional development. Our planning allows opportunities for direct, investigative, and reflective teaching within the whole class and in groups.

Organisation of the Mathematics lessons In the Early Years Foundation Stage, mathematics is underpinned by Development Matters. Daily child initiated learning opportunities are cross-curricular and children experience a wide range of open-ended problems and resources, both indoors and out. In the EYFS, mathematics forms a fundamental part of the day through both adult led sessions child initiated learning. In Reception, there are two focused mathematics lessons. Group activities in Nursery last between 10-15 minutes.

In Years 1-6, mathematics is taught daily as a discrete subject. In Key Stage 1, lessons last between 45-60 minutes and in Key Stage 2 they are 60 minutes in length.

In each Key Stage, mathematical knowledge is applied and skills reinforced whenever relevant in other curriculum areas.

Assessment, Recording and Reporting Assessment is integrated throughout the Power Maths lessons and unit structure. This allows teachers to make regular assessments of children's understanding to inform their teaching and measure progress. Assessment is a chance for children to review key concepts and reflect on their learning. In addition to this, Power Maths Progress tests are used half-termly and at the end of the year to allow staff to track children's progress against Age Related Expectations. The tests allow staff to be able to identify any misconceptions using the diagnostic assessment tools.

Children are encouraged to mark their own work so that they are able to identify their own mistakes and rectify them.

Teachers monitor the acquisition of skills, knowledge and understanding through appropriate teacher intervention, observations and discussions with groups and individuals, and records of achievement in the key skills in mathematics for each year group are updated on Target Tracker. This is used to create a summative termly assessment of where individual children are working and to inform our tracking system, in order that they who are not making good progress over time can be targeted for extra support. Assessments are reported to parents, governors and others when appropriate.

Special Educational Needs Where necessary, adaptations will be made to the curriculum, to equipment and resources to allow access to mathematics for pupils with SEN, including provision for pupils that are exceptionally able in mathematics.

Tracking and Monitoring Tracking of children's progress will be reviewed at Pupil Progress Meetings with teachers and identify children who may need extra support. Children with Special Educational Needs (SEN), English as an Additional Language (EAL), Gypsy Roma Traveller (GRT) and those children entitled to Pupil Premium will also be discussed. Where data indicates a whole school issue, it will form part of the school's Academy Development Plan (ADP) which runs alongside the school self-evaluation process. Monitoring will happen through the examination of work in books, speaking to children, analysis of assessment and results and through other means as deemed necessary to gain the information needed.

Equal Opportunities The mathematics policy firmly supports the equal opportunities philosophies of the school and all children will have access to the mathematics curriculum, regardless of gender, disability, ethnicity, social, cultural or religious background.