

Mathematics Policy

2023/24

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 mathematics 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' have been part of a Maths mastery hub for five years. The hub worked together with schools to support the continuous improvement of mathematics education for all children and further develop staff's subject knowledge. Last year, along with other Cidari schools, we also took part in the EEF research project which aimed to build on the work with the Maths hub and focus on closing the gap and supporting lower attainers within the mastery curriculum. This year we are continuing to work with Cidari schools to enhance mathematics even further.

Planning Staff from Year 1 to Year 6 base their teaching on White Rose Maths, Reception follow the Mastering Number programme from the NCETM and supplement this with resources from White Rose Maths where appropriate. In Nursery, mathematics is underpinned by Development Matters and Birth to 5 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.

Organisation of the Mathematics lessons 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 the EYFS, mathematics forms a fundamental part of the day through both adult led sessions and child initiated learning. In Reception, there are four focused mathematics lessons. Group activities in Nursery last between 10-15 minutes.

Mathematics lessons aim to improve fluency by developing children's number sense, being able to use the most appropriate method for the task in hand and be able to apply a skill to multiple contexts. To further improve fluency and in addition to the mathematics lessons, KS2 have a weekly arithmetic lesson and Years 1 and 2 follow the NCETM Mastering Number programme. Times Tables Rock Stars and Purple Mash are also used throughout school and at home.

Children receive a weekly Essential Skills lesson which focuses on one skill per half term. These skills are then given opportunities to be applied throughout mathematics lessons wherever possible.

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 White Rose 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. NFER standardised tests are used termly and at the end of the year to allow staff to track children's progress. 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 (SEND), 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.

Appendix

Presentation expectation in books

Target tracker objectives for that unit to be stuck in at the start of the unit.

Short date then miss a line before writing the learning objective (KS1 can be printed). Both are to be underlined neatly.

Flashbook 4 to be completed daily at the start of each lesson and recorded in books.

One digit in one square.

White Rose worksheets (or any other) need to be cut up and stuck in vertically and straight.

There should be evidence or a challenge in each lesson.

Any lines for tables etc should be drawn using a ruler.

Marking should reflect the school's Marking Policy.

SEND children may have pre printed date and LO and work different to the rest of the class.