



Mathematics

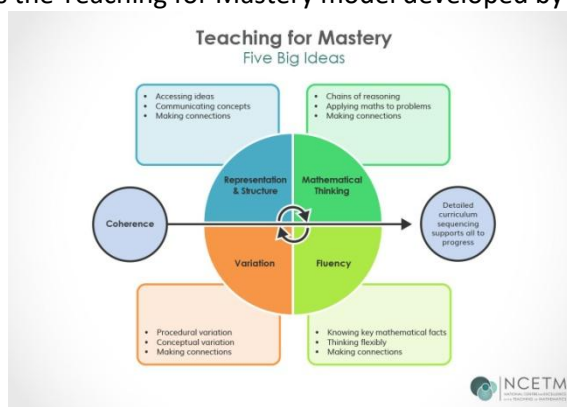
Curriculum Intent	At Goosnargh Whitechapel, we want all our children to be confident, resilient and enthusiastic mathematicians. We encourage pupils to be independent learners and not be fearful of having a try or making mistakes and we teach them that this is a key part of the learning process. We recognise the high value of Maths, both in everyday life and throughout a range of career paths and this value is shared with children in order to build a sense of aspiration. We aim to prepare pupils for their future lives by building a secure sense of all areas of Maths built around the key skills of fluency, reasoning and problem-solving. Our curriculum caters to the needs of all individuals and is adapted where necessary to meet specific needs. In line with the National Curriculum we want our children to: • become fluent in the fundamentals of Mathematics, through varied and regular practise so that they develop conceptual understanding and the ability to recall key knowledge rapidly and accurately • reason mathematically by thinking logically, connecting concepts and using mathematical language to explain their reasoning • solve problems by applying their knowledge to a variety of increasingly complex problems, including those with several steps.
Curriculum Implementation	At Whitechapel, Maths is taught progressively and sequentially across school from our Early Years Foundation Stage Reception class upwards. We work with our local Maths Hub, coordinated by the NCTEM (National Centre for Excellence in the Teaching of Mathematics) to ensure that staff are accessing high quality professional development, backed by research and expertise. High quality professional development is key to our approach at Whitechapel and this takes the form of our work with the Maths Hub, staff meetings, the sharing of practise and reflective discussion. Throughout this our high expectations for all pupils is the key driver. Maths is taught through a mastery approach, predominantly using the 'White Rose Maths' scheme of work. This scheme meets National Curriculum requirements and is utilised and adapted by staff to meet the specific needs of the pupils they are working with. It provides mixed age group resources to ensure that when pupils are in mixed classes here at Whitechapel, they receive a curriculum suited to their year group. Whilst working through units of work, previous concepts are regularly revisited to ensure fluency is maintained. Pupils are taught through whole class teaching followed by group, paired or independent tasks, where the focus is on all pupils working together on the same content at the same time, ensuring that all children master all concepts before moving on to new content. This enables all pupils to progress through areas of Mathematics at the same pace. Where pupils master concepts quickly, there are opportunities to practise and apply these concepts in a variety of increasingly complex problems which really develops their mastery of Maths. Underpinning this mastery approach are high expectations for all pupils to achieve, regardless of their starting point or any barriers to learning they may face. Where necessary, pupils are sometimes targeted for a 'pre-teach' session with one of our highly skilled teaching assistants. This gives them confidence, skills and knowledge so

Mathematics

that they are able to access whole class teaching with their peers.

To support the teaching of Maths, we have a range of mathematical resources in classrooms including dienes, rekenreks and counters (concrete equipment). When children have grasped a concept using concrete equipment, images and diagrams are used (pictorial) prior to moving to abstract representation. Abstract Mathematics relies on the children understanding a concept thoroughly and being able to use their knowledge and understanding to answer and solve questions without equipment or images.

White Rose uses the Teaching for Mastery model developed by the NCTEM.



Throughout school 'White Rose' is supplemented by resources from NCTEM, Test Base, NRich and Corbett Maths. This enables us to provide:

- CPA (concrete/pictorial/abstract) representations to show concepts clearly
- Clear progression of calculation
- Variation (procedural and conceptual)
- Mathematical vocabulary
- Purposeful and appropriate use of manipulatives (practical resources)

On a daily basis, pupils' progress is closely monitored and assessed by class teachers enabling them to make judgements to inform their teaching both 'in the moment' and for next steps. 'Live marking' is utilised by both teachers and teaching assistants to ensure that misconceptions are identified within lessons and pupils are given instant feedback to support their learning whilst it is happening. Summative assessments are completed at the end of each half term. The results of these, along with day to day interactions and formative assessment, enable teachers to assess pupils accurately. Teachers and SLT have termly pupil progress meetings where attainment and progress is analysed and discussed to ensure all pupils are meeting their full potential. The main purpose of all assessments is to ensure we are making excellent provision for each child to meet their specific needs.

In order to support pupils' development of fluency both in school and at home, we utilise 'Mathletics' and 'Times Table Rock Stars' online learning platforms. This enable parents to support learning closely linked to class topics.

EYFS



Mathematics

	In the Early Years Foundation Stage Maths is taught using the NCTEM Mastering Number programme. We are currently working with the Maths Hub to develop and embed the delivery of this. Through this programme, children build sound understanding of number and this is delivered through adult-led input followed by continuous provision exploration and consolidation. Shape, Space and Measures coverage is planned alongside the Mastering Number programme to ensure children in Reception receive full coverage of the EYFS Maths curriculum.
Measuring Impact	The impact of the curriculum is assessed in a range of ways across the phases including: • Teacher assessment during daily Maths lessons • Pupil conferencing to discuss understanding, retention of knowledge etc. • Learning walks and book looks • Summative assessment analysis • Discussions with staff including termly pupil progress meetings At the end of each year we aim for pupils to be secure in the content for their year group. Where they aren't, this is explored in termly pupil progress meetings to ensure provision is developed to enable them to close any gaps in their knowledge. Some children will have progressed further and achieved greater depth. <u>EYFS Assessment</u> At the start of the Reception year all pupils are required to complete a statutory Reception baseline assessment. This is a practical activity which includes an assessment of early mathematical knowledge and understanding such as counting, addition and interpreting mathematical vocabulary. Alongside this we carry out a range of observations, including the use of CEM, a computer based assessment tool. This informs our next steps and teaching. <u>End of Key Stage 1 Standard Assessment Tests (SATs)</u> Assessment takes place in May at the end of Key Stage 1 using National Curriculum Assessments. This consists of an Arithmetic and Reasoning paper. Although these tests are no longer statutory and are marked internally, they provide useful assessment information to support our pupils as they move into Key Stage 2. https://www.gov.uk/government/publications/optional-key-stage-1-tests-2025-Mathematics-test-materials <u>Year 4 Statutory Multiplication Check</u> Pupils in Year 4 will undertake a statutory multiplication tables check towards the end of the year. The purpose of this check is to determine whether pupils can fluently recall their times tables up to 12, which is an essential skill in Maths. It is an on-screen check consisting of 25 questions. Pupils receive 3 practice questions before the test begins. They will then have 6 seconds to answer each question. The test generally takes less than 10 minutes to undertake. Pupils will be well prepared for the format of this test and will practise in school. For further information please see:



Mathematics

<https://www.gov.uk/government/collections/multiplication-tables-check>

Year 6 Statutory Standard Assessment Tests (SATs)

Assessment takes place in May at the end of Key Stage 2 using National Curriculum Assessments. These are statutory and measure pupil attainment against the National Curriculum standards. They are marked externally and the results are published (for the school, not individual pupils). These assessments consist of an Arithmetic paper and two Reasoning papers.