ST JOSEPH'S RC PRIMARY SCHOOL, RAMSBOTTOM MATHS POLICY



MISSION STATEMENT

Our school is proud to be part of the Roman Catholic Church in the parish of St Joseph's. Our mission is to serve God, uphold the worth and dignity of every person and enable them to develop their talents. Everything we do is rooted in the values of the Gospel, as we seek to deepen faith, strengthen hope and grow in love in a respectful, safe and happy environment.

At St Joseph's we believe, 'Happiness first and all else follows'.

INTRODUCTION

This policy outlines the teaching, organisation and management of the Maths taught and learnt at St. Joseph's R.C. Primary School. This policy has been established to address the National Curriculum 2014. The implementation of this policy is the responsibility of all the teaching staff.

INTENT

At St Joseph's we aim to inspire all of our pupils, irrespective of their ability, to reach their full academic potential. We recognise that mathematics is a critical area of skill and knowledge that impacts on the quality and value of the lives we lead. Therefore, our objectives in the teaching of the maths curriculum include:

- 1. To promote and develop children's enjoyment and enthusiasm for maths through exciting, practical, first-hand learning and opportunities to explore and investigate.
- 2. To ensure that the statutory requirements of the National Curriculum for mathematics are taught well and applied across all subjects of the curriculum.
- 3. To ensure that the school's schemes of work and guidelines for mathematics are taught thoroughly, systematically and progressively to all pupils by all staff.
- 4. To help pupils to become mathematicians by developing their confidence and resilience in problem solving and reasoning so that they can apply their independent thinking and questioning across the curriculum.
- 5. To ensure that from the EYFS onwards, pupils are confident in their understanding and application of their basic skills in number and the number system and that they build upon their prior learning at every stage.
- 6. To encourage children to use their increasing knowledge, skills and understanding of mathematics to investigate, ask questions and solve challenging problems.
- 7. To develop pupils' confidence and skill in mental calculation methods to underpin their written methods as they explore the areas of mathematics and address increasingly complex problems.
- 8. To bring mathematics to life and make it real, to ensure that children understand the importance of maths in their everyday day lives.

IMPLEMENTATION

TEACHING AND LEARNING STRATEGIES

- 1. An appropriate range of teaching and learning strategies will be used in all mathematics lessons to capture pupils' interest and to promote effective learning and progress.
- 2. Teachers will use the NCETM curriculum prioritisation documents, alongside resources from White Rose, supported by a range of teaching and learning resources, to develop the knowledge, skills and understanding of every child, ensuring that all pupils, including those with SEND, achieve high standards for their ability and make appropriate progress. Children will be encouraged to; ask questions, solve problems, discover new information, apply and consolidate their knowledge, skills and understanding through first-hand experience, investigations and practical work.
- 3. Teachers will make use of the immediate and wider environment to help pupils apply mathematics and see the relevance of mathematics to their own lives. They will set challenging work, tasks and problems to increase children's knowledge, skills and understanding and to extend their thinking.
- 4. Teachers will assess children's work in mathematics through formative and summative judgements by; asking questions, observing learners during lessons, observing pupils solving practical problems and listening to pupils' discussions. Work will be marked regularly and frequently and pupils will be given appropriate, clear feedback which tells them how well they have done and what they need to do next to improve.
- 5. The mathematics subject leader will support the teaching and learning of mathematics by; providing strategic leadership and direction for mathematics, monitoring progress and standards across the school, reviewing and revising the mathematics policy, monitoring and supporting teachers in the teaching of mathematics, keeping staff up to date on new developments in mathematics, monitoring the effectiveness of the planning and development of mathematics, auditing, monitoring the effective and appropriate use of resources and obtaining new resources.

<u>SEND</u>

Children with special needs are taught within the daily mathematics lessons and are encouraged to participate as appropriate. Their work is differentiated in order for them to achieve the objective. Where applicable, children's IEPs include suitable objectives from the National Curriculum and teachers keep these objectives in mind when planning work. Specific children are sometimes withdrawn to work on their own specific targets with 1:1 support. Children with special educational needs are also provided with opportunities in lessons to work in small groups with the class teacher or with learning support assistants.

MASTERY APPROACH

From September 2023, the mastery in maths approach will be used in Year 1-5 as part of our phased introduction since September 2019. All remaining classes will use elements of the maths mastery approach. These may include all pupils being taught the same objective through the 'I do, we do, you do' approach, differentiation through questioning, support, apparatus or challenge. During lessons, teachers and teaching assistants will mark as the children work to ensure any misconceptions are instantly picked up on and can be addressed immediately, in same-day intervention or before the following lesson if necessary. The impact of this should be seen as the children move through school and should reduce the amount of gaps in children's knowledge and

understanding in mathematics as they move through school and will ensure that all children are confident in using and applying their skills in mathematics.

INCLUSION

The learning of more able children (including Able, Gifted and Talented) is extended through challenges and deepening problem solving skills. Higher-level teacher questioning ensures such children are stretched in all aspects of their maths.

For those children who are underachieving in maths or have special educational needs (SEND), work is carefully differentiated to meet their requirements. Teachers direct questions towards these children (at their ability level) to maintain their involvement and develop their learning.

Practical resources are readily available in maths stations within the classroom; some examples of concrete resources we use include Numicon, Base 10, multilink, counters and tens frames. Additional support is planned for within each lesson. Intervention programmes are put in place where necessary and children may be withdrawn for additional maths sessions. Children's IEPs reflect specific provision and the impact this has made on their learning.

RECORDING OF WORK

Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method of recording. Children are encouraged to use mental strategies before resorting to a written method.

Recording work may involve children making rough jottings first followed by recording final answers for the teacher's attention. All children are encouraged to work tidily and neatly when recording their final answers but jottings may take any form and are important evidence for the teacher. Children present their work in accordance with the School's Calculations Policy.

FEEDBACK AND MARKING

Children should receive constructive feedback, either verbally or written, on the majority of their mathematics. Written work is to be marked in accordance with the feedback and marking policy. Appropriate next steps are to be set and clearly communicated to the children and are to be followed up in 'Green Time'.

There are occasions when it is appropriate for the children to self-assess or peer-assess their written work with guidance from the teacher. This will allow the children to immediately identify their misconceptions and assess their own performance.

HOMEWORK

Please refer to St. Joseph's Homework Policy.

RESOURCES

Mathematics resources are centrally resourced in the Maths cupboard but all classes have a range of concrete resources appropriate to their year group in class which children have access to during lessons.

THE USE OF COMPUTERS

Computing is used in various ways to support teaching and motivate children's learning. This includes the IWB, laptops, iPads and calculators.

ASSESSMENT AND REPORTING

In our school, we are continually assessing our children, recording and tracking their progress. We see assessment as an integral part of the teaching progress and strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the children, thus benefiting the children and ensuring progress.

Information for assessment is gathered in various ways: by talking to the children, observing their work, marking their work etc. Teachers use these assessments to plan further work, in a continuous cycle of planning, teaching and assessment. Short-term assessment will be an informal part of every lesson. The teacher will share the objectives (WALT) for the lesson with the children and make sure they are clear what is being expected of them (WILF) to successfully achieve the objective. This is a necessary part of assessment for learning and helps the children take ownership for their own learning. The short term assessment will also involve the teacher checking the children's understanding during and at the end of the session to inform future planning and lessons.

Medium-term assessment takes place every 10 weeks across school. Additionally, end of Block WRH tests are taken at the end of each unit. The outcomes of the assessments are recorded by the class teacher, used to inform future planning and identify individuals who are emerging, expected or exceeding.

Long-term assessments: Assessment data is input to Target Tracker and analysed by the SLT, maths lead and class teachers. Teachers will also draw upon their supplementary notes and knowledge about their class to produce a summative record. Accurate information is reported to the next teaching staff in annual transition meetings during the summer term. Children's progress, together with their 'next steps', is shared at Parents' Evenings in autumn and spring and in annual reports at the end of the summer term.

<u>IMPACT</u>

This policy will ensure that all pupils become fluent in the fundamentals of mathematics, including the varied and regular practice of increasingly complex problems over time. They will be enabled to reason mathematically by following a line of enquiry, understanding relationships and generalisations, and developing an argument, justification or proof using mathematical language. Effective teaching will ensure that they can solve problems by applying their mathematics with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions. As pupils progress through the school, they will become increasingly confident mathematicians

OTHER POLICIES

This policy should be read in conjunction with other key policies including; assessment, calculations, marking, special needs and equal opportunities, deployment of support staff and homework.

REVIEW

This policy will be reviewed in conjunction with the School Improvement Plan's Policy Review Cycle.

September 2023