



Hamsey Green
Primary School



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Maths Policy

Reviewed by: John Boffa DH

Review date: August 2023

Next Review: August 2024

Our Vision

At Hamsey Green Primary school we value every pupil and the contribution they have to make. As a result we aim to ensure that every child achieves success and that all are enabled to develop their skills to be a success in the future. Mathematics is both a key skill within school, and a life skill to be utilised throughout every person's day to day experiences.

Rationale

Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is important in everyday life. The jobs our children will apply for have yet to be created – meaning they need to be equipped with the skills to solve any problem they could be faced with.

The National Curriculum for mathematics (2014) describes in detail what pupils must learn in each year group. Combined with our Calculation Policy, this ensures continuity, progression and high expectations for attainment in mathematics. It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society. At Hamsey Green we use White Rose Maths as a base for our mathematics programme. We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education.

Aims

We aim to provide the pupils with a mathematics curriculum and high quality teaching to produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to the full.

Our pupils should:

- Foster a positive attitude to mathematics
- To develop a growth mindset through: independent thinking, perseverance, cooperation and self-confidence through a sense of achievement and success.
- To develop a deeper understanding of mathematics through a process of enquiry and investigation.
- To develop the ability to apply knowledge, skills and ideas in real life contexts outside the classroom, and become aware of the uses of mathematics in the wider world.
- To develop an ability and inclination to work both alone and cooperatively to solve mathematical problems.

- have a well-developed sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out numbers mentally
- calculate accurately and efficiently, both mentally and in writing and paper,
- drawing on a range of calculation strategies
- recognise when it is appropriate to use a calculator and be able to do so effectively
- make sense of number problems, including non-routine/'real' problems and identify the operations needed to solve them
- explain their methods and reasoning, using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2d and 3d shapes

Provision

Pupils are provided with a variety of opportunities to develop and extend their Mathematical skills, including:

- Group work
- Paired work
- Whole class teaching

Pupils engage in:

- the development of mental strategies
- written methods
- practical work
- investigational work
- problem solving
- mathematical discussion
- consolidation of basic skills and number facts
- maths games

We recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. We use accurate mathematical vocabulary in our teaching and children are expected to use it in their verbal and written explanations.

Mathematics contributes to many subjects and it is important the children are given opportunities to apply and use Mathematics in real contexts. It is important that time is found in other subjects for pupils to develop their Numeracy Skills, e.g. there should be regular, carefully planned opportunities for measuring in science, for the consideration of

properties of shape and geometric patterns in art, and for the collection and presentation of data in science, history and geography.

We endeavour at all times to set work that is challenging, motivating and encourages the pupils to think about how they learn and to talk about what they have been learning. Additional enrichment opportunities are provided for pupils to further develop mathematical thinking e.g. through cooking, music, and maths investigations and games.

Teachers plan problem solving and investigational activities every week to ensure that pupils develop the skills of mathematical thinking and enquiry.

To provide adequate time for developing mathematics, maths is taught daily and discretely. Maths lessons may vary in length but will usually last for about 45 minutes in Key Stage 1 and 60 minutes in Key Stage 2.

Early Years Foundation Stage (EYFS)

We follow EYFS curriculum guidance for Mathematics. However, we are committed to ensuring the confident development of number sense and put emphasis on mastery of key early concepts. Pupils initially explore numbers to 20 and the development of models and images for numbers as a solid foundation for further progress.

Resources

A bank of essential mathematics resources including Numicon and place value counters and more are kept in class cupboards. Further resources relating to key topics are kept in the maths and science cupboard.

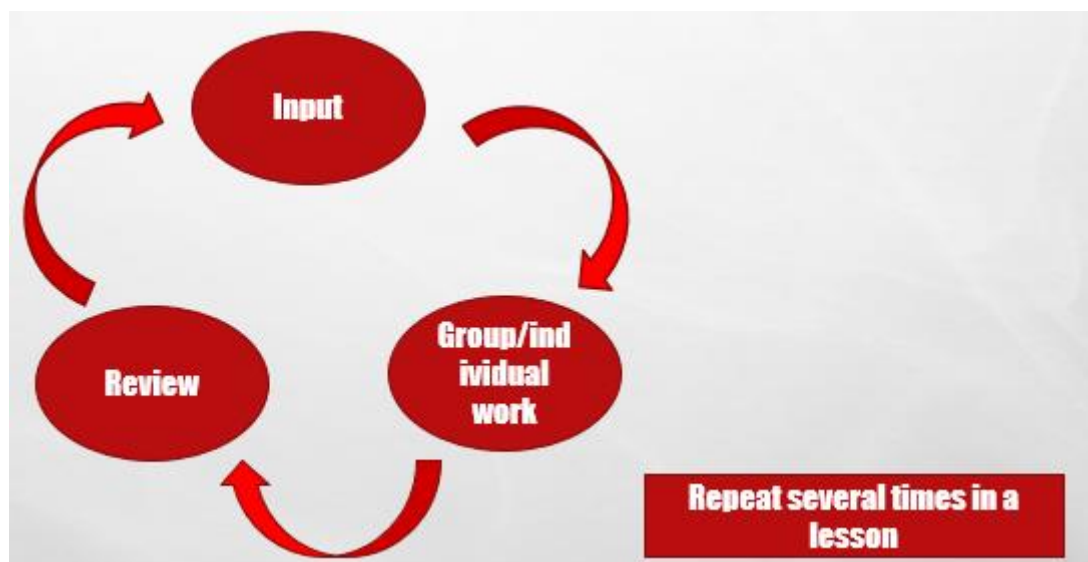
Mastering Number

This year we are continuing our work with the Maths Hub with mastering number programme. This is designed for EYFS to Year 2 and is a solely practical lesson, working in pairs. The sessions last 15 minutes and are done in support of daily maths lessons. [In addition to this Year 3 and 4 are also taking part in the mastering number program.](#)

Teaching Approaches

Teachers follow a 'Maths Mastery' lesson structure approach:

This means children work through the tasks together as a whole class. Interventions are in place prior to lessons or after to allow children to access the learning.



Target Setting

Teachers set termly individualised targets for each child which allow children to focus on a key concept identified as posing a problem to the individual. In EYFS these targets are presented as whole class targets.

Assessment

Formative Assessment

Teachers integrate the use of formative assessment strategies such as effective questioning, clear learning objectives, the use of success criteria and effective feedback and response in their teaching.

Summative Assessment

Using termly tests, pupils are assessed against NC levels every term. The school's progress tracking system is updated termly. [The school uses Testbase from Year 2 to year 6 for these assessments. Year 1 continue to use end of Block and Rising Stars.](#)

National Curriculum tests are used at the end of KS2; teachers use past and sample papers to inform their assessments as they prepare pupils for these assessments.

All assessments and teaching informs teachers understanding of a child's ability in maths and this is recorded on our school assessment system.

The school's Assessment and Marking Policies inform high quality feedback and pupils' response to it in Mathematics.

Role of the Subject Leader

- Ensures teachers understand the requirements of the National Curriculum and helps them to plan lessons.
- Leads by example by setting high standards in their own teaching.
- Prepares, organises and leads CPD and joint professional development.
- Works with the SENDCO and Intervention Co-coordinator.
- Observes colleagues from time to time with a view to identifying the support they need.
- Attends CPD provided by Tewkesbury District Partnership and other providers.
- Keeps parents informed about Mathematics issues
- Discusses regularly with the Headteacher and the mathematics governor the progress of implementing National Curriculum for Mathematics in school
- Deploys support staff to address mathematics related needs within the school.
- Monitors and evaluates mathematics provision in the school by conducting regular work scrutiny, learning walks and assessment data analysis

Please also see our Calculation Policy.