



MATHEMATICS POLICY

HELSEBY HILLSIDE PRIMARY SCHOOL

Mission Statement:

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

Using the Programmes of Study from the National Curriculum (2014), it is our aim to develop the children's **mathematical fluency, reasoning** and ability to **solve problems** by developing:

- a positive attitude towards mathematics and an awareness of the fascination of mathematics
- to develop confidence and competence with numbers and the number system through rapid recall
- competence and confidence in mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- initiative and an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment
- to help children understand the importance of mathematics in everyday life

Breadth of Study

Through the creative curriculum children are offered the opportunity to develop their mathematical knowledge by using and applying their problem solving skills, across a range of activities in all subjects, where appropriate.

Children work in pairs, groups and independently, and are given the opportunity to experience open-ended as well as closed tasks. The emphasis in lessons is to make teaching interactive, lively and engage all children, encouraging them to talk about mathematics.

Children are taught and encouraged to develop a variety of methods for calculating/ recording their work. They are encouraged to use the most appropriate and convenient strategy e.g. mental, formal pencil and paper, using practical equipment, images, number lines etc.

We encourage children to develop a positive attitude to mathematics through the wide range of mathematical experiences offered to them – across the curriculum e.g. games and practical activities, working with computers/ iPads as a mathematical tool, using a range of methods to solve calculations.

Planning and Organisation

Teachers use the Revised White Rose Maths Hub Resource (2018) as an outline to ensure a consistent and thorough approach to planning. These are then adapted and used to build lessons, alongside other resources available (e.g. Abacus, Classroom Secrets). Lessons can be planned and adapted daily (based on Feedback Policy).

Mathematics must be taught as part of the curriculum, on a daily basis, with teachers putting aside a lesson of between 45-60minutes.

We teach through a CPA (concrete, pictorial, abstract) approach. Methods/ strategies are clearly exemplified on maths working walls for the current maths focus. There is an emphasis on mental strategies/oral work (especially times tables), which are practised regularly, as well as instructional teaching for the whole class or groups (see basic skills list for each year group).

Within the Reception class, teaching is based on objectives from the Framework for Early Years Foundation Stage – ensuring children are working towards the Early Learning Goal for Mathematics in Development Matters.

Inclusion

We aim to provide for all children regardless of gender, ethnicity or home background so that they achieve as highly as they can in Numeracy according to their individual abilities. Gifted children will be identified and suitable learning challenges provided and extra extension opportunities available outside school will be accessed as appropriate through close liaison and discussion with parents.

Pupil's recording their work.

Children are encouraged to calculate, record and communicate their mathematics in a variety of ways – via formal written calculations, own jottings, diagrams, images etc.

Children are encouraged to use mental strategies and own jottings before moving on to more formal written methods. They are encouraged to work tidily and neatly when normally recording their work, using one square for each digit when using squared paper.

Marking

In line with Helsby Hillside's feedback policy teachers use the feedback forms to inform successes/ next steps/ misconceptions marked against the objective. Next steps/ misconceptions are then addressed at the start of the next lesson. This can also inform future planning. Children will respond to feedback comments/ next steps using a purple pen. Some pieces of work can be self/peer marked (with guidance and support from teachers- particularly in upper KS2).

Assessment and Record Keeping

Assessment is an integral part of teaching and learning and is a continuous process. Teachers make daily assessments and reflect on progress made during/ after each lesson (on feedback forms). By doing this, teachers are able to track the progress of individuals and ensure children make appropriate progress. These also inform plans and next steps for lessons.

On 3 occasions throughout the school year, teachers also track progress (from year 1-6) by setting the children Maths Hub/NFER progress tests. These results are used alongside teacher judgements made from class work to adapt groupings, set further targets for the children and discussed at pupil progress meetings. Pupil progress meetings are timetabled each term for all classes. Progress is discussed and appropriate intervention considered and put into place. These results are also reported via twice yearly parent progress evenings and in the written interim and end of year reports.

Resources

Each class has a stock of core maths resources (age appropriate) to support the learning of mathematics. There is also additional whole school mathematical equipment and resources centrally stored outside the Year 2 classroom.

Conclusion

In following the guidance and philosophy provided in this policy, teachers will provide the best opportunity for the pupils at Hillside Primary School to begin to realise their mathematical potential. It should also be read in conjunction with the following policies:

Teaching and Learning Policy
Assessment and Record Keeping
Feedback / Marking policy
Special Educational Needs Policy
ICT Policy
Equal Opportunities Policy
Health and Safety Policy

This policy will be reviewed every three years or in the light of changes to legal requirements.

Member of staff responsible: Sarita Jagota
Date policy written: February 2019
Date approved by the full Governing body:
Date to be reviewed: February 2022