



Pattishall Primary is committed to safeguarding and promoting the welfare of children and expects all staff and volunteers to share this commitment.

Mathematics Policy

A. Introduction

Mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason, solve problems and use number. It helps children to understand relationships and patterns in both number and space in their everyday lives. The Mathematics curriculum provides breadth and balance and should be relevant and differentiated to suit the needs of all children in the modern world. It should be flexible, motivate all pupils and encourage success at all levels.

B. Aims

General

To ensure all staff, children, parents/carers and Governors are aware of the aims for learning and teaching Mathematics at Pattishall Primary School and that these are consistently applied.

School Staff have a responsibility:

- To promote a confident, positive attitude towards the learning and use of Mathematics making it an enjoyable experience;
- To promote confidence and competence with numbers and the number system;
- To promote the ability to solve problems through connecting ideas, decision-making and applying their mathematical skills in a range of contexts, including other subjects such as Science;
- To promote mathematical reasoning by following a line of enquiry, developing an argument and making justifications using mathematical language;
- To promote a practical understanding of the ways in which information is gathered, presented and used;
- To promote the exploration of features of shape and space and develop measuring skills in a range of contexts; and
- To understand the importance of Mathematics in everyday use, especially in relation to essential life skills, such as telling the time and understanding money.

Children have a responsibility:

To develop an enjoyment of learning through practical activity, investigation, exploration; mental exertion and discussion;

To develop confidence and competence with numbers and the number system;

To develop the ability to solve problems through connecting ideas, decision-making and applying their mathematical skills in a range of contexts, including other subjects such as Science;

To develop the ability to reason mathematically by following a line of enquiry, developing an argument and making justifications using mathematical language;

To develop a practical understanding of the ways in which information is gathered and presented;

To explore features of shape and space, and develop measuring skills in a range of contexts;

To understand the importance of Mathematics in everyday life, especially in relation to essential life skills such as telling the time and handling money; and

To foster positive attitudes towards Mathematics by developing pupils confidence, independence, persistence and co-operation skills.

Parents and Carers have a responsibility

- To be understanding and supportive of our aims in learning and teaching Mathematics.

- To attend and contribute to Parent Consultation Meetings.
- To support their children with Mathematics homework activities (please refer to Homework Policy) including the importance of learning their number bonds and times tables off by heart.
- To praise their children for the good things that they do in Mathematics.
- To communicate and work with School whenever further support is needed to develop their children's mathematical skills and understanding.

Governors have a responsibility:

- To meet with the Mathematics Subject Leader at least once a year to find out about;
 - ❖ the school's systems for planning work, supporting staff and monitoring progress;
 - ❖ the allocation, use and adequacy of resources; and
 - ❖ how the standards of achievement are changing over time.
- Visit School and talk to pupils about their experiences of Mathematics;
- Promote and support the positive involvement of parents in Mathematics;
- Attend training and other events relating to the Mathematics curriculum;
- To be understanding and supportive of our aims in the learning and teaching of Mathematics and to review this policy annually.

C. Implementation of the Mathematics Policy

FS organisation

- Our Reception teachers use the Early Years Foundation Stage Curriculum to support the teaching of Mathematics. Please see the EYFS policy for more information.

The National Curriculum for Mathematics

Currently, our KS1 and KS2 teachers use the Maths No Problem scheme of work, which is aligned with the National Curriculum 2014, to support their planning and delivery of Mathematics teaching. This scheme is based on the Singapore teaching methods and the use of high quality textbooks.

Organisation

Children are taught Mathematics for approximately 1 hour daily in mixed ability class groups. Teaching and learning is differentiated to best match the needs of the class and the individuals within it.

Calculation Policy

Our teachers follow the models set out in the National Curriculum 2014. These have been discussed in a staff meeting and a record of the methods is available in the Maths No Problem resources.

Resources

The use of Mathematics resources is integral to the concrete – pictorial – abstract approach and thus planned into our learning and teaching. We have a wide variety of good quality equipment and resources, both tangible and ICT based, to support our learning and teaching.

These resources are used by our teachers and children in a number of ways including:

- a) Demonstrating or modeling an idea, an operation or method of calculation, e.g.: a number line; place value cards; base 10 materials; money or coins; measuring equipment for capacity, mass and length; bead strings; the interactive whiteboards and related software; 3D shapes and/or nets; Numicon and related resources and software; multilink cubes; clocks; protractors; calculators; dice; number and fractions' fans; individual whiteboards and pens; and 2D shapes and pattern blocks, amongst other things;
- b) Enabling children to use a calculation strategy or method that they couldn't do without help, by using any of the above or other resources as required; and
- c) Providing a context for the application and practicing of calculation strategies and number skills.

Resources are kept in classrooms for daily use where they are readily accessible to pupils. Some resources are kept in the maths cupboards located outside Year 5. Mathematics software is also available through the activelearnprimary.co.uk website and mymaths.co.uk. Teachers are also encouraged to use the school playgrounds as an outdoor classroom when possible, for example, when teaching length, area or perimeter.

Homework

Please refer to the School's Homework Policy.

Subject Leader

The role of the Subject Leader is to provide professional leadership and management in Mathematics in order to secure high quality teaching, effective use of resources and high standards of learning and achievement for all pupils. They will achieve this by affecting the following key areas: strategic direction and development; learning and teaching (including planning and marking and presentation); leading and managing staff; and efficient and effective deployment of staff and resources.

The Subject Leader has regular discussions with the Head Teacher and other senior leaders about learning and teaching in Mathematics. During the academic year the Subject Leader has specific allocated time for subject self-evaluation activities.

Assessment, Record Keeping and Reporting

Please refer to the School's Teaching, Learning and Assessment Policy

Inclusion

Please refer to the School's Inclusion Policy

Monitoring and Review

The Head teacher, Senior Leadership Team and Mathematics Subject Leader will monitor the effectiveness of this policy on a regular basis. The Head teacher and Mathematics Subject Leader will report to the governing body on the effectiveness of the policy at least annually and, if necessary, makes recommendations for further improvements.