

PERRYFIELDS INFANT SCHOOL MATHEMATICS POLICY



Helping each other to learn and grow

At Perryfields Infant School we believe that Mathematics is the study of relationships in number, measure, space and statistics and their application to solving problems in a variety of situations.

It provides children with a way of viewing and making sense of the world in which they live. Building on their own experience, it encourages thinking and reasoning skills, embraces natural curiosity and develops the confidence to tackle problems which arise, not only in mathematics but in other areas of the curriculum.

AIMS

- To foster a positive attitude to mathematics for all children, enabling them to approach mathematical activities with confidence, understanding and excitement.
- To build upon and extend the children's previous experiences and ensure progression and development of their understanding, knowledge and use of mathematical language.
- To provide a curriculum which meets the needs of the Foundation Stage and KS1 of the National Curriculum.

OBJECTIVES

- To enable children to become numerate.
- To enable children to communicate mathematical ideas and concepts using appropriate language.
- To develop the understanding of mathematical symbols and conventions including mathematical language.
- To encourage an appreciation of a range of recording methods.
- To give children the ability to select and use a range of mathematical resources.
- To value the process of enquiry as well as the answer and to appreciate that the definitive answer is not always possible.

SUBJECT ORGANISATION

- At Perryfields Infant School we use a variety of teaching styles in order to address different learning styles.
- The ***Mastery Approach*** is at the heart of our maths teaching. This approach advocates the use of concrete resources and pictorial representations before progressing to the abstract. It also advocates variation in the way in which problems are posed. This policy should be read in conjunction with the ***Mastery across the Curriculum*** document.
- Where possible, cross-curricular opportunities are also used, which provide opportunities to apply, extend and promote the use of mathematics skills and knowledge to other areas of the curriculum.

- In Key Stage 1, class teachers plan their numeracy using objectives from the National Curriculum (2014) and the Chris Quigley Essentials document.
- In the Foundation Stage the organisation and management of mathematics lessons is tailored to meet the needs of the children who arrive from different settings e.g. nursery, playgroup, and therefore will have had different learning experiences. The yearly teaching programme for the Foundation Stage is in line with the Early Learning Goals and provides a bridge from the goals to the National Curriculum. A wide range of activities supports the teaching and learning of mathematics, including stories, songs, rhymes, imaginative play, board games and outdoor play.
- We believe that progression should be planned at an individual rate. Success and challenge are vital to all. Our planning and teaching aims to ensure all children are engaged, active learners.

FOUNDATION STAGE MATHEMATICS

The programme of study for the Foundation Stage is set out in the EYFS Framework. Mathematics involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems and in describing space, shape and measures.

KEY STAGE 1 MATHEMATICS

- The principle focus of mathematics teaching in Key Stage 1 is to ensure that children develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, using practical resources in particular (e.g. using concrete objects and measuring tools).
- Children should also develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary.
- Children should also use a range of measures to describe and compare different quantities such as length, mass, capacity/ volume, time and money.
- Children should read and spell mathematical vocabulary at a level consistent with their increasing word and spelling knowledge at Key Stage 1.
- Within each class, where appropriate maths objectives are differentiated to meet the different needs and abilities of the children. Through using the mastery approach, objectives may not be differentiated, but challenges and variation will be provided to enable children to apply their understanding of concepts.
- Teachers plan in teams to provide exciting and inspirational experiences for the children.

ASSESSMENT AND TARGET SETTING

- Teacher observation and intervention is based on professional expertise and forms our major method of assessment. Information is gathered by means of careful observation and discussion and informed planning for individual work.

- Marking in mathematics follows the marking policy for the school. The purpose of marking is to give the child and teacher feedback on progress. For this reason we aim to mark work with children present whenever possible. In this way, we can emphasise achievements, discuss difficulties and suggest areas of improvement.
- Assessments are maintained to track records of individual children's progress. The records are updated regularly and are used to inform levels of achievement toward the end of year targets for each year group.
- At least once a term a piece of mathematics is assessed and kept in the children's progress file.
- Parents are informed formally of children's progress at twice yearly Parents' Evenings and through the end of year report. Appropriate information about teaching in each year group is also given to parents. However, staff are involved in informal discussions with parents throughout the year, particularly if they have cause for concern about a child's progress.

CALCULATION POLICY

This policy should be read in conjunction with the Calculation Policy.

INCLUSION

- We aim to provide for all children so that they achieve their full potential.
- We identify which children or groups of children are under-achieving and take steps to improve their attainment through LSA and SENCO support and interventions
- More able children are identified and suitable challenges provided.

EQUAL OPPORTUNITIES

All children are provided with equal access to the mathematics curriculum. We aim to provide exciting learning opportunities regardless of gender, ethnicity or home background.

SMSC

In mathematics, the use of mastery enables children adequate time to gain confidence and self-esteem. Children have opportunities to share work and achievements regularly in assemblies. They learn to give their own views and explanations, as well as listening to and showing respect for the explanations of others. Children are expected to take responsibility for selecting and looking after apparatus. They have the chance to work together in groups and pairs to solve problems and play games, in order to improve their skills. These activities involve turn-taking and competition. Models and resources used are culturally diverse and inclusive.

BRITISH VALUES

National Curriculum subjects are taught using a cross curricular, thematic approach. All children are encouraged to learn about working together in pairs and groups and about treating others with respect and tolerance, regardless of background, and understanding rules within school and society in order to be prepared for life in modern Britain. Lessons, assemblies and whole school ethos encourage children to learn about decision-making, making informed choices, debating and democracy and many school decisions are influenced through pupil voice, via the democratic process of the School Council.

DISPLAYS

All classrooms have a number line (relevant to the year group) and a hundred square prominently displayed. Vocabulary relevant to the current topic is also be displayed.

MONITORING AND EVALUATION

The Mathematics Subject Leader and SLT are responsible for monitoring and evaluating curriculum progress. This is done through book scrutiny, planning scrutiny, lesson observations, pupil interviews, staff discussions and audits of resources.

REVIEW

This policy will be reviewed according to the policy reviews timetable taking into account national and school based initiatives.

Signed.....

Dated.....