Dimple Well Infant School and Nursery

Mathematics Policy

Approved by Governors October 2021

Introduction

Mathematics helps children to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables them to understand and appreciate relationships and patterns in both number and space in their everyday lives.

This document is a statement of the aims, principles, strategies and procedures for Mathematics throughout our school.

Aims

- To develop a positive attitude towards the subject;
- To become confident and proficient in number, especially mentally;
- To encourage a confident approach towards investigations and problem solving;
- To work with measures, apparatus and data with efficiency and understanding;
- To develop language that children can use appropriately when talking mathematically;
- To provide a rich and interesting curriculum and to relate learning where possible to real life situations and first hand experiences;
- To use ICT as a tool to enhance learning;
- To teach basic knowledge and give practise in skills and reasoning which will prepare the children to live in a rapidly changing world where they will have to be adaptable and cope with sophisticated processes and techniques;
- To stimulate interest, curiosity, wonder and imagination;
- To develop a good self-image, self-motivation, confidence and the ability to work individually and as part of a team;
- To establish that learning is exciting, rewarding and an enjoyable and positive experience, so encouraging an appetite for acquiring further knowledge, skills and experience to promote lifelong learning;

Organisation

Our mathematics teaching is based around The National Curriculum (2013) and the Early Years Foundation Stage Statutory Framework (2021). This teaching is supported by a number of resources. Teaching will follow the seven strands of learning, as set out in the National Curriculum. Covering the objectives in the seven strands will support the children in their progression towards the Early Learning Goals and the appropriate National Curriculum levels at Key Stage 1.

The seven strands are:

- Using and applying mathematics
- Counting and understanding number
- Knowing and using number facts
- Calculating
- Understanding shape
- Measuring
- Handling data

Mathematics is taught daily across the Early Years Foundation Stage and Key Stage One.

Planning

Teachers plan from the Mathematics National Curriculum objectives, using a variety of published and internet resources to support, challenge and differentiate. Key objectives are used to inform planning concerning age related expectations and to enable focused intervention when those expectations have not been met. Teachers follow the school's Long Term plans, which set out clear coverage of the block and units of work within the National Curriculum. Medium Term plans show the elements that will be covered and short term planning outlines specific learning objectives that will be taught throughout the unit of work.

Early Years Foundation Stage (EYFS)

Teachers support children in developing their understanding of problem solving, reasoning and numeracy in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. Teachers offer opportunities for these skills to be practised, in order to give children confidence and competence in their use.

Children will develop the skills to count, sort and match, identify patterns, make connections, recognise relationships, work with numbers, recognise shapes, have an awareness of space and use a variety of units for measuring. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other areas of learning and development. Children will develop their mathematical awareness in many ways including through stories, songs, games and imaginative play.

Assessment and Record Keeping

Assessment is completed in a two forms. There is summative assessment which is completed at the end of a term or year. The system that is used to make these formative assessments is based on statutory documentation, such as the EYFS Statutory Framework document and the National Curriculum. Furthermore, in Year Two the children are assessed against a Statutory Framework, which is outlined by the government. This assessment enables the Year Two teaching staff to make a thorough judgement on a child's academic outcomes at the end of the Key Stage.

Official assessment includes:

- Children nearing the end of the Early Years Foundation Stage will complete end of Foundation Stage assessments.
- Children nearing the end of Key Stage One will complete Standard Attainment Tests (SATs).

Additionally, formative assessment is used; this is a more ongoing form of assessment. This can be completed as often as on a daily basis. Daily feedback is provided to children throughout the lesson and through detailed marking using the school's marking policy of 'Yippee Yellows and Growing Greens'.

Enhancing Mathematics

The Mathematics Curriculum is enhanced in many ways across the school. Children are provided with opportunities to learn and consolidate existing skills. Through creative cross curricular approaches to learning, the children are supported and encouraged to use mathematics in real life situations.

Information Communication Technology

Opportunities to use Information Communication Technology (ICT) to support teaching and learning in Mathematics will be planned for and used appropriately. Please see the list of useful websites. These websites are intended to support the teaching and learning of Mathematics.

Home/School Link

The link between home and school is fostered in a number of ways. In the Early Years Foundation Stage parents are provided with information on the type of mathematics that will be covered throughput the week, this provides ideas for parents in which they can support their child in their mathematical development. They also receive information on age related targets in mathematics for each term.
In Key Stage One, at the start of each year, parents are provided with information on age related targets in Mathematics and attention is drawn to the Calculation Policy, available on our school website. This document shows parents the methods that are used when teaching their children to calculate. All parents across the school receive a Curriculum Information Sheet which also provides details on Mathematics each half term.

Inclusion

In line with the Equality Act 2010 we aim to meet the needs of all learners, taking into account gender, ethnicity, culture, religion, language, disability, age and social circumstances. Differentiated tasks will be planned for both higher and lower achieving pupils at the Short Term planning stage.

Special Educational Needs

The provision for children with Special Educational Needs is detailed in the Inclusion/SEN policy and is directly related to the Special Educational Needs and Disabilities Regulations 2014 documentation. Central to this is the early identification, intervention and careful planning for differentiation, Individual Education Plans and individual plans for gifted and talented children will detail relevant individual targets in Mathematics. Additional details can be found in the school's Gifted and Talented policy.

Monitoring and Evaluation

Monitoring and evaluation of Mathematics teaching in the school is carried out by the Mathematics Co-ordinator and the Head teacher. When necessary and possible, discussion with the children will take place along with lesson observations and scrutiny of work. Planning is moderated by the Senior Leadership Team.

Role of the Mathematics Co-ordinator

The subject co-ordinator will be responsible for improving standards of teaching and learning in Mathematics through:

- Pupil progress
- Provision of Mathematics (including intervention and support)
- The quality of the learning environment
- Taking the lead in policy development

- Auditing and supporting colleagues in their Continuous Professional Development
- Purchasing and organising resources
- Keeping up to date with Mathematical developments

Review
This policy will be reviewed in 2023.