Spring Vale Primary School

Mathematics Policy 2022-23

Together Everyone Achieving More	**Together** with friends, families and community we care for ourselves, each other, our school and our world. **Everyone** has access to a broad, balanced and stimulating curriculum, whatever their gender, race, ethnicity or ability. **Achieving** our best is what we aim for every day we come to school. **More** independence makes better learners and helps us to become good citizens.

Clearly, these aims cannot be achieved unless we are a truly inclusive school where every single child matters. The Numeracy Co-ordinator, supported by the Senior Management Team, has the responsibility of ensuring that all learners are catered for and valued so that they can achieve their best in all subjects.

POLICY FOR THE TEACHING OF MATHEMATICS

HEADTEACHER Mr. C. Blunt

MATHEMATICS CO-ORDINATOR Miss K Davis

Introductory Statement

This is a policy, which outlines the programmes of study, which is used at Spring Vale Primary School to teach Mathematics. It follows National Curriculum recommendations and Guidelines – related documents:

- National Curriculum for Mathematics

This policy outlines the programme which is currently used at Spring Vale Primary School to teach Mathematics.

The policy was written following consultation with Senior Management and staff. The format used was taken from suggested guidelines provided by the LA.

- Updated By Miss K Davis 2023
- Review Date - Summer 2024
- To be approved by governors Autumn 2023

POLICY STATEMENT

Why Teach Mathematics?

Mathematics equips pupils with a 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 every life, many forms of employment, science and technology, medicine, the economy, the environment and development and in public decision-making. Different cultures have contributed to the development and application of mathematics. Today, the subject transcends cultural boundaries and its importance is universally recognised. Mathematics is a creative discipline. It can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time, discovers a more elegant solution to that problem, or suddenly sees hidden connections.

What Is Numeracy?

Numeracy is a proficiency which involves confidence and competence with numbers and measures. It requires understanding of the number system, a repertoire of computational skills and an inclination and ability to solve number problems in a variety of contexts. Numeracy also demands practical understanding of the ways in which information is gathered by counting and measuring; and is presented in graphs, diagrams, charts and tables.

Aims

- To raise the standards of achievement of the pupils;
- To aspire to outstanding leadership in Mathematics and to set high expectations of what can be achieved by staff;
- To set expectations for Numeracy proficiency for all pupils;
- To provide a broad and balanced mathematical curriculum, with a range of mathematical contexts for pupils to explore;
- To increase pupil confidence in mathematics so they are able to express themselves and their ideas using the language of maths with assurance;
- To develop efficient and effective systems for recording and reporting pupils' progress and attainment in mathematics in order that they can mature and become more competent with number and measures.

The National Curriculum

The National Curriculum describes what must be taught in each Key Stage. Spring Vale follows the National Curriculum, which provides detailed guidance for the implementation of the orders and ensures continuity and progression in the teaching of mathematics.

Planning

Planning is undertaken at three levels.

Long Term planning is based on the yearly teaching programmes set out in the National Curriculum.

Medium Term planning is carried out half termly. Teachers select the main objectives from the yearly teaching programmes referring to the higher or lower years where necessary. The suggested planning sheets from the Framework and Collins scheme are used to ensure a balanced mathematics curriculum. We recognise the need to revisit topics regularly to revise and consolidate skills and then extend them. The medium term plans form a developmental scheme of work. It has been decided the four rules will be covered in streamed ability groups for three lessons every week.

Short Term planning is carried out weekly. These plans include learning objectives for the mental/oral starter and the main activity, resources to be used, any differentiation, key vocabulary, key questions, homework and evaluation comments. In EYFS and Year 1 written paper planning is used. In Years 2-6 SMART planning is used. SMART planning is printed and put into folders where it is then evaluated for the following week.

Short term planning is monitored fortnightly by the mathematics co-ordinator and LMT.

Cross Curricular Links

Mathematics is taught mainly as a separate subject but every effort is made to link maths with other areas of the curriculum. We try and identify the mathematical possibilities across the curriculum at the planning stage. We also draw children's attention to the links between mathematics and other curricular work so they see that maths is not an isolated subject.

Teaching Methods and Approaches

Maths teaching at Spring Vale provides opportunities for:

- Group work
- Paired work
- Whole class teaching
- Individual teaching

Pupils engage in:

- The development of mental strategies and skills
- Written methods
- Practical work
- Investigational work
- Problem solving
- Mathematical discussion
- Consolidation of basic skills and routines

At Spring Vale we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. We also recognise the importance of using the appropriate vocabulary in our teaching and children are expected to use it in their verbal and written explanations. We endeavour to set work that is challenging, motivating and encourages the children to talk about what they have been doing.

Organisation

The daily mathematics lesson lasts for approximately one hour, although, this will be reduced in Key Stage 1 and the Foundation Stage. Children may be withdrawn from the groups by TAs if this is appropriate and will further their learning.

Homework

Mathematics homework is given each week. The amount set is usually about 30 minutes. Not all homework is written work which needs marking. Children are also encouraged to practise number bonds and multiplication facts at home.

Display

At Spring Vale we recognise the role display has in the teaching and learning of mathematics by having maths work displayed in the school. Every classroom has a mathematics board or area, which has number lines, number grids, vocabulary and other display material that provides a visual support for the children's mental processes.

Assessment and Record Keeping

At Spring Vale we are continually assessing our pupils. We see assessment as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

Targets

Children's work is planned effectively and differentiated according to our 'moving up' targets. The targets are stuck in the front of children's maths books. Once a child shows evidence of meeting the target the target can be dated. If enough independent evidence is collected, the target can be highlighted to show that it has been achieved.

Assessments

Short term assessments are an informal part of every lesson and are closely matched to the teaching objectives. These are for the teacher's immediate attention and action and tend only to be recorded as marking comments in books.

Medium term assessments are carried out termly. The purpose of these assessments is to review and record the progress the pupils have made in relation to the key objectives. Children's progress towards the key objectives is recorded on class records with the head teacher.

Long term assessments are carried out towards the end of the school year (in May) when pupils' attainment is measured against school and national targets. This is achieved by drawing on class records of key objectives and analysis notes regarding the SATs and assessments. Statutory tests are carried out at year 6 and non-statutory at years 3, 4 and 5. These tests are carried out to in December and May in order to provide a benchmark for children's progress. Evidence is collected by the Mathematics co-ordinator through a full analysis of all the questions for each paper. This evidence is passed onto the next class teacher to be used for future planning and to highlight any areas of concern.

Reporting to Parents

All parents receive an annual written report on which there is a summary of their child's effort and progress in mathematics over the year. A curriculum letter giving detail of maths coverage is sent home to parents every term, highlighting major areas of the curriculum to be taught. Parent's evenings are held each term where targets are set and progress and concerns are discussed. At the end of year 6 each pupil's level of achievement against national standards is included as part of the annual written report.

Resources

Resources for the delivery of the mathematics curriculum are stored both centrally and in classrooms. Everyday basic equipment is kept in classrooms. Additional equipment and topic specific items are stored centrally. Books are stored on shelving within each classroom. A number of published materials are used to facilitate the teaching of mathematics but as a school we realise the need for the teaching of maths to be scheme assisted not scheme driven. The main published schemes being used at presented to support the delivery of the curriculum are Collins Maths and Ginn Numeracy. A variety of other resources are available. Mathematics materials are updated, when relevant, through consultation between the co-ordinator and staff.

The Role of the Co-ordinator

- To have an overview of practice that is taking place in the school.
- To support staff through Inset, planning and delivery of mathematics.
- To attend relevant training and meetings.
- To monitor and manage the use of resources and be responsible for the expenditure of the maths budget.
- To monitor planning and practice.
- To audit and action plan areas of need.
- To liaise with link Secondary school staff

Equal Opportunities

As a staff we endeavour to maintain an awareness of, and to provide for equal opportunities for all our pupils in mathematics. We aim to take into account cultural background, gender and special needs, both in our teaching attitudes and in the published materials we use with our children.

Children with Special Educational Needs

We aim to fully include SEN pupils in the daily mathematics lesson so that they benefit from the emphasis on oral and mental work and by listening and participating with other children in demonstrating and explaining their methods.

Where necessary teachers will, in consultation with SENCO, draw up an Individual Educational Plan for a child. If a child's needs are particularly severe they will work on an individualised programme written in consultation with appropriate staff. When planning, teachers will try to address the child's needs through simplified and modified tasks or the use of support staff.

The most able

At Spring Vale we are aware that we have children who are capable of achieving beyond the standards for their age. Mastery challenges enable children to be stretched to their full capability and achieve high levels by the end of Year 6.

Pupil Premium

Children who are eligible for the PPG and are not making expected progress are taught by the PPG teacher in Year 3, this ensures that they make accelerated progress and achieve levels that are in-line with PPG children nationally. The role of the PPG teacher is evaluated by the DH termly and changes to provision is made if needed.

Maths Intervention

Children who are at risk of not making expected progress are tracked half termly using data systems. HT, DH and AHT hold half termly review meetings to put intervention into place and this is evaluated at the end of the following half term. Intervention could be in the form of extra mental maths, extra times table practise or after school booster sessions.