The Partnership of Springfield and The Meadows

Springfield Mathematics Curriculum Policy

INTENT

Aims & Objectives:

To develop a love of mathematics across the school where the children are involved in a range of motivational, exciting and multisensory activities every week and developing confidence and skills for life.

We aim to develop pupils' abilities within an integrated programme of Number, Measurement and Geometry, based on White Rose Maths and using the Concrete, Pictorial and Abstract (CPA) method. Pupils will be given opportunities to develop their use, knowledge and understanding of mathematics within a broad and balanced curriculum, with opportunities to consolidate and reinforce taught mathematical skills.

Pupils at Springfield School will leave Year 6:
- With a passion for numbers and problem solving,
- With a love of investigative and inquistive work that sees them getting stuck in to practical activities within their lessons.
- With the ability to recall number facts and mulitplication skills.
- With a range of developing mathematical skills that will support them in real life situations as an adult.
- With a positive mind towards mathematics.
- With suitable vocabulary to explain answers and theories to adults and with their peers.

The teaching and learning of mathematics at Springfield School is set out in a clear yearly rolling programme taken from the statutory requirements of the National Curriculum (2013) and the updated Early Years Foundation Stage Framework (September 2021).
The mathematics programme of study (2013) is based on the following key areas:

- Number and Place Value
- Number - Addition and Subtraction
- Number - Multiplication and Division
- Number - Fractions
- Measurement
- Geometry - Properties of Shape
- Geometry - Position and Direction
- Statistics
- Ratio and Proportion (Year 6)
- Algebra (Year 6)

IMPLEMENTATION

Curriculum Planning and Organisation:

Across the school, mathematics is taught through a formal but differentiated programme of study, working from objectives on the National Curriculum, focusing on the Concrete, Pictorial and Abstract teaching of mathematics.

Early Years

Mathematics in the Early Years is developed through play.
Maths is taught through differentiation, using the concrete, pictorial, abstract (CPA) approach. It is linked to topic work, provided through 1:1 implementation and through activities available in the environment each day. Through the lower end of teaching mathematics at Springfield School, milestones from the Early Years Foundation Stage (EYFS) Development Matters document is used before moving into the National Curriculum. We provide opportunities for children to develop their understanding of number, measurement, pattern, shape and space through a variety of activities, both child and teacher initiated, that allow them to enjoy, explore, practise and talk confidently about mathematics. The children in EYFS are assessed on the EYFS outcomes from Development Matters and through the school's assessment proforma, set out by the objectives of the EYFS framework and National Curriculum outcomes.
Our pupils will also work on specific mathematical learning to achieve the targets linked to their EHCP.

National Curriculum

Key Stage (KS) 1 and 2 teach at least 3 discreet maths sessions per week, focusing on number, geometry and measure over each term. At Springfield School, our priority is to teach number and place value at the beginning of each term, as evidence-based practice has taught us that number is the foundation of all mathematical topics. Take from the White Rose Maths schemes of work (National Curriculum coverage), our long-term plans are in place to ensure coverage of all mathematical areas. Relevant homework is set, that is appropriate to the children's needs, to consolidate or extend learning that has taken place during school time. Homework set can be written, for example in the form of worksheets, or oral/practical, for example to consolidate number bonds or number recognition.
It is good practice to make use of cross curricular links to enable children to use their learning in a real-life context. Therefore, pupils should be given plenty of opportunities within sessions to use and apply the mathematical skills and concepts they have learned. This is apparent through our school's 'money sense' scheme, Springfield Pounds, where pupils can earn Springfield Pounds across all areas of the school and decide whether they want to spend or save.

Curriculum planning in mathematics is taken from our long-term overviews and adapted to meet the needs of the individuals in that current class / year group and staff develop a weekly overview (at a glance planning) and PowerPoints / flipcharts that are used in the lesson and include lesson objectives / success criteria. Labels are used on children's work to show the success criteria, learning objective and the level of support given. (See marking policy for more information).

Our mathematics curriculum is delivered using Foundation stage guidelines and the National Curriculum for Mathematics as a tool to ensure appropriate pace, progression and coverage of the subject. This coverage is reviewed continually by class teachers and planning is adjusted accordingly to ensure appropriate coverage of all mathematical strands. Planning is based upon the class group requirements with an aim on teaching skills so that children have a deep understanding and mastery of concepts. These plans are adapted to meet the needs of specific groups of children and to address areas identified by the school as needing development. Opportunities for differentiation are also identified at this stage.

Multiplications Check in Year 4 – June 2024

- Identified children in Year 4 will complete this where Teacher assessment indicates it is appropriate.

The use of Numicon and manipulatives

Numicon and other appropriate manipulatives are used as part of our CPA approach and staff have received training to support the teaching and learning of mathematical concepts. It is a highly effective strategy to teach the four areas of calculation. It is expected that taught mathematics will follow the CPA approach supported by The Deans for Impact (2019) report that states, pupils begin to understand abstract mathematical concepts through concrete representations, learning to apply what they know by gradually transitioning from concrete to visual to abstract.

IMPACT

Assessment:

Work will be assessed in line with the Assessment Policy and Marking Policy and recorded on the School Progression Guidance for Mathematics, focussing on Number on a termly basis.

- Measure and Geometry progression will be recorded at least annually.
- Pupils will have maths targets where appropriate and will know their 'next steps' to ensure progression.
- Interventions will be in place for those children not achieving expected progress in number.

- Evidence will be gathered over time to show progress from entry to exit points.

Monitoring and Review:

The Senior Leadership Team (SLT) and maths lead take the responsibility for the monitoring of mathematics and the standards achieved by pupils. Monitoring takes the form of:

- Lesson observations
- Book scans

Data analysis - school's progression assessment tool, based on the objectives of the National Curriculum and EYFS framework.

- Discussion with pupils and class teachers
- Learning Walks
- Moderation of work.

The subject leader's role is to empower colleagues to teach maths to a high standard and support staff in the following ways:

- By keeping up to date on current issues; disseminating relevant information and providing training for staff members (either directly or through other professionals)
- Leading by example / modelling lessons or styles of teaching
- Having a knowledge of the quality of mathematics provision across the school
- Identifying and acting on development needs of staff members
- Monitoring expectations, provision and attainment across the school and providing feedback to develop practice further in order to raise standards.
- Providing necessary equipment and maintaining it to a high standard.
- Developing development plans and ensuring its implementation.
- Reporting to governors.

Policy produced: November 2023	Policy agreed:
Signed:	Chair of LAB
Signed: Smatham Dates	Acting Headteacher (s)
Review date: November 2025	