Whinmoor St Paul‟s (VA) C of E Primary School

Maths Policy

At Whinmoor St. Paul‟s Church of England Voluntary Aided Primary School, everything we do is underpinned at all times by the Christian ethos of valuing the individual. We believe that every child is respected as a unique child of God, the future adults in society.

We believe children are gifts from God and we are privileged to work with their families and carers, to enable them to live life to the full.

Every Child is a Unique Child of God

Agreed: April 2024

Review Date: April 2025

Signed Chair of Governors: Mrs R Davies

Date: 24th April 2024

Our Mission and Ethos

At Whinmoor St Paul"s Primary school we believe that every child is a unique child of God and lives in a world that God has made.

We aim:

- ***To provide a safe nurturing environment where every child can achieve his/her full potential***
- ***To inspire a lifelong love of learning***
- ***To value all faiths and cultures and to celebrate diversity***
- ***To develop a sense of respect and responsibility towards self, others and the world in which we live***
- ***To build strong relationships with the local community, our city and the wider world***

And to do all this as a caring community based on strong Christian values

The Governing Body and staff of Whinmoor St Paul"s Primary School take as our first priority the responsibility to safeguard and promote the welfare of our pupils, to minimise risk and to work together with other agencies to ensure rigorous arrangements are in place within our school to identify, assess, and support those children who are suffering harm and to keep them safe and secure whilst in our care.

THE NATURE OF MATHEMATICS

"Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."

(The National Curriculum for Mathematics 2014)

At Whinmoor St Paul's we believe that Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

Using the Programmes of Study from the National Curriculum for Mathematics we aim to develop:
An enjoyment and curiosity of mathematics and for children to feel confident to become successful;

- Children's abilities to use and apply mathematics to solve problems in both the classroom and in real life contexts;
- A confidence to communicate ideas in written form and orally;
- Independent and collaborative ways of working, encouraging children to share ideas and solve problems together;
- A wide range of mathematical vocabulary to be modelled and used in the classroom environment;
- The children's ability to recall mental facts accurately and quickly and using effective written calculation methods;
- Children's logical thinking, reasoning and ability to problem solve as transferable life skills.

Teaching and Learning

Each class teacher is responsible for the mathematics in their class in consultation with and with guidance from the mathematics subject leader. A typical lesson involves all classes following the White Rose Scheme of learning which focuses on core topics to build deep understanding.

During these lessons children engage in:

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

In addition to the daily maths lessons, teachers will provide regular opportunities to practice of Key Instant Recall Facts (KIRF's) to help develop fluency. These fluency lessons will be timetabled 3x 10 minutes per week in KS1 building to at least 3x 15 minutes per week by the end of KS2. KIRFs are identified each half term and children should aim to practise them at home at least 3 times a week as homework.

Additional time is allocated to arithmetic to ensure key skills in calculation are retained. The teaching of multiplication facts continues to be a discrete focus, where the applications of these skills are essential for accessing other areas of mathematics. To make the learning relevant, cross-curricular links are made wherever possible and children are encouraged to apply skills from all areas to complete real-life challenges and give learning a sense of purpose.

To provide adequate time for developing key skills in fluency, reasoning and problem solving, each class teacher will provide at least five daily mathematics lessons per week. This may vary in length but will usually last for about 45 to 60 minutes. Additional mathematics may be taught within other subject lessons when appropriate.

Class teachers provide high quality maths lessons ensuring that there is emphasis on direct whole-class teaching, groups/partner work and independent work. We use a range of approaches (concrete, pictorial and abstract methods) following the White Rose scheme of work, teaching mathematical concepts through small steps. Staff are expected to teach and model correct mathematical language, which scaffolds children's reasoning and explanation skills – sentence stems are used to develop this.

Teachers of the EYFS ensure the children learn through a mixture of adult led activities and child initiated activities both inside and outside of the classroom. Areas of provision within the classroom support maths, ensuring children are able to access throughout the day to practise and develop skills being taught. In addition, consistent, daily maths lessons take the form of direct teaching, which is followed up by enhanced activities placed in areas of provision in the classroom which may be accessed independently or supported by an adult.

Children's Records of Work

Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method of recording. Children are encouraged to use mental strategies before resorting to a written method. All children are encouraged to work tidily and neatly when recording their work. When using squares one square should be used for each digit.

In Y2 and Y3 1cm square exercise books are to be used. This changes to 7mm square exercise books in Year 4 through to Year 6.

EYFS record informally within the setting. For example: - on the playground - on whiteboards - using jigsaws - physically ordering numbers. Staff in Foundation use photos to ensure records of each child's achievements are maintained.

Planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape Space & Measure) provide the long term planning for mathematics taught in the school.

Years 1-6 use the White Rose scheme of learning as its medium term planning. This provides a detailed, structured curriculum which is mapped out across all phases, ensuring continuity and supporting transition.

EYFS planning is based on the White Rose scheme of learning as its medium term plan with support from Development Matters and the Early Learning Goals (Number, Shape Space & Measure).

Resources

The National Curriculum for Mathematics 2014 is our main planning and teaching resource, learning objectives for teaching in the daily maths lesson will be from this.

In order to support the delivery of maths lessons to all children the school has a large range of resources available. Within the classroom maths resources are available to children at all times, these include basic resources such as number lines, 100 squares, rulers, counters, numicon, etc. Other specific resources (e.g. balance scales, meter rulers) are made available as required.

We recognise the importance of a stimulating learning environment. The school provides an environment, which is rich in a wide variety of print, pictures, diagrams, charts, tables, models and images. Each classroom has a mathematical display area, which includes a working wall with mathematical vocabulary, visual aids and interactive activities where appropriate. This is updated regularly in accordance with the area of maths being taught at the time.

Assessment, Feedback and Record Keeping

<u>Short term</u>
Children's classwork is assessed frequently through regular marking, analysing children's errors, questioning and discussion. Children's work is marked and feedback is given with next steps as in line with the marking and feedback policy. At the beginning of each new unit, child are assessed on their prior knowledge using a pre assessment and then once again using the White Rose post assessment materials for each unit. From this teachers are then able to pinpoint gaps in learning and help children to understand any misconceptions.

<u>Medium Term</u>
Each term children in each class are assessed using the White Rose tests. These materials are used alongside judgements from class work to form a teacher assessment for each child. Assessment grids are used to track progress against each objective. These judgements are then fed into the whole school tracking system. A moderating meeting to review the accuracy of these judgements is held each term.

Long Term

The following tests are also carried out annually:

- SATs at the end of Y2 and Y6
- The children are assessed in the early years using the Foundation Stage Profile

Contribution of Maths to teaching in other curriculum areas

Mathematics is a tool for everyday life. It is a network of concepts and relationships and is used to analyse and communicate information and ideas in practical tasks and problems. By making links to other subjects at the initial planning stage we aim to provide real context in which to apply skills taught during the maths lessons.

Inclusion

Children with special educational needs and Pupil Passports:

- Within the daily mathematics lesson teachers provide activities to support children who find mathematics difficult. Children with SEND are taught within the daily mathematics lesson and are able to take part at their level through the support of a Teaching Assistant and appropriate activities and resources.
- Where applicable children's Individual Provision Map will incorporate suitable objectives from the Maths curriculum.
- Intervention Groups will take place at times throughout the year, in order to give further support to vulnerable groups.

All children at Whinmoor St Paul's have an equal entitlement to access the Maths curriculum and make progress in order to attain the best they can in the subject.

Monitoring Teaching and Learning

This will be undertaken by the Subject Leader and other members of SLT.
Areas to be monitored will be decided at the beginning of each term and will be recorded on the Monitoring Calendar so that staff are informed. Results of any monitoring will be fed back to staff quickly and to SLT at their meetings so that any action required can be carried out effectively.

Roles and Responsibilities

1. **Subject Leader:**
   - Supports teachers in their planning and teaching;
   - Lead by example in the way they teach in their own classroom;
   - Prepare, organise and lead INSET, with the support of the Head teacher;
   - Work co-operatively with the Inclusion Manager;
   - Monitor different aspects of maths teaching and learning feeding back to SLT and staff on findings and future actions.
   - Attend INSET provided by LA consultants and Maths Hubs;
   - Be available to discuss with the head teacher, class teachers, parents and Maths governor the progress of maths in the school.

2. **Class Teachers:**
   - To deliver a Daily Maths lesson to their children which is engaging and motivating, is informed by the National Curriculum for Mathematics 2014 and is accessible to all children.

3. **Children:**
   - To develop their skills, understanding and attainment in Maths through engagement with the lesson, behaviour conducive to learning, independent work and thought and confidence to challenge or ask for help.

4. **Parents / Carers:**
   - To support their children's learning in maths by taking an interest in their child's progress, encouraging the children to complete maths homework and having a good relationship with the class teacher so that queries and problems regarding maths can be dealt with easily.

We have a clear duty under the Equality Act 2010 to ensure that our teaching is accessible to all pupils.

Inclusive PSHE will foster good relations between pupils, tackle all types of prejudice, promote understanding and respect, enabling us to meet the requirements, and live the intended spirit, of the Equality Act 2010.'

Review Date: April 2024