**ST ANDREW’S METHODIST PRIMARY SCHOOL**

**STRIVING FOR EXCELLENCE-**



**WITH GOD**

**Mathematics Policy**

Reviewed  **October 2022**

Headteacher : Anne Barker

Chair/Vice Chair of Governing Board: Geoff Jones Date:

Date of Next Review **October 2024**

This policy has been scrutinised to ensure it meets the requirements of the single equality duties. The school will make every reasonable adjustment to comply with the duties and actively avoid discrimination.

**Principles**

Our mathematics policy reflects the principles identified in our whole school aims. Through a positive caring environment, we provide the opportunity for every child to reach their full potential. We embrace Christian values and ensure all children are ready for their next steps.

Mathematics is a core aspect of the curriculum where high expectations across all strands ensures children are **‘Striving for excellence, together as one with God’** reflecting our Christian vision.

We aim to develop and nurture our children, so that they become confident mathematicians for the future. We want them to know and understand the purpose, relevance and importance of mathematics in everyday life. Our intention is for every child to be confident in mathematics so that they can make a valued contribution for themselves, the wider community and the world around them.

**Early Years Foundation Stage (EYFS)**

We provide quality, well-planned EYFS numeracy activities in accordance with the DfES document ‘The Early Years Foundation Stage’. We offer a wide range of valuable Mathematical learning experiences, which aim to underpin all future learning. Our aims are to promote development in Number, numerical patterns and shape, space and measures.

Throughout EYFS, we aim to cover important aspects of mathematical understanding and provide the foundations for mathematics. This is achieved through a wide range of practical and play activities. This promotes understanding of patterns, sequences, sorting, matching, counting and problem solving and encourages the use of appropriate language to develop simple mathematical ideas.

**Key Stage 1 and 2**

St Andrew’s follows the Mathematics National Curriculum (2014). The programmes of study are used to give a balanced and broad curriculum to all of our pupils. We use the materials advised by Lancashire Mathematics as our base and we follow a spiral curriculum ensuring that units are revisited regularly. We supplement with teaching resources such as Fluent in Five for daily arithmetic in year groups two- six and I See Maths by Gareth Metcalfe for reasoning and problem-solving.

We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order to make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education.

**Purpose**

Mathematics is a creative and highly interconnected 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 in most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, and a sense of enjoyment and curiosity about the subject.

**Aims**

The National Curriculum for mathematics aims to ensure that all pupils:

* become fluent in the fundamentals of mathematics, including through varied and

frequent practice with increasingly complex problems over time, so that pupils have

conceptual understanding and are able to recall and apply their knowledge rapidly

and accurately to problems

* reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
* can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
* have a secure foundation in mental calculation and recall of number facts before standard written methods are introduced and can give verbal and written explanations.

The programmes of study are organised in a distinct sequence and structured into separate domains. Pupils should make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

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**General Aspects**

Mathematics is taught to all children irrespective of gender, race, creed or ability. It is important to us that all children are provided with equal access to all curriculum areas.

**Children with Special Education Needs and/or Disabilities (SEND)**

We aim to fully include SEND pupils in the daily mathematics lesson, so that they benefit from listening and participating with other children in demonstrating and explaining their methods. Where necessary, teachers will consult with the SENDCO, draw up individual targets/ plans and use this to provide an adapted curriculum to meet the individual child’s needs.

**Guidelines**

There is a dedicated, structured mathematics lesson for all children, which will involve oral or mental calculation work, as well as independent and group activities. Activities may involve teacher input, group work, paired work, practical work and individual work.

**Planning**

At St Andrew’s we use the planning materials advised by Lancashire Mathematics. Teachers are provided with a long-term plan showing comprehensive coverage each term of the main objectives. This is then broken down each term into medium term plans, which show how each objective will be met, giving an indication of how much time is spent on the objectives.

A weekly planning sheet is in operation, giving detail on what is to be contained in each daily lesson. This includes the use of ‘fix-it’ time and extension activities.

**Homework**

To develop and extend their techniques and learning, as well as prepare for future learning, pupils are given homework tasks. These tasks reflect and support classroom work, help teachers recognise individual pupil’s understanding, and provide information to parents on work being covered at school. Homework is provided on Seesaw and through hard copies.

**Equipment**

Classrooms have a bank of appropriate age related resources. There are maths resources in the Key Stage One shared area and within Key Stage Two.

**Assessment and Reporting**

Assessment at St Andrew’s is informative, useful and manageable. Informal and on-going assessment happens within daily lessons. Teachers use effective questioning and monitoring/marking of work to assess who is working and achieving the lesson objective.

Yearly transition meetings are held, where each teacher is passed maths attainment records for all pupils. Attainment and progress are an ongoing process throughout the year, with teachers identifying each pupil’s performance on SONAR using a colour-coded system against the taught learning objectives. Pupils also complete termly written assessments, assessing pupils’ arithmetic, problem solving and reasoning skills.

Attainment and progress are monitored each term by the mathematics subject leader. They complete a thorough analysis of the school’s data, including sub-groups e.g. gender, pupil premium, EAL, SEND etc. The information gathered through termly data analysis is then fed back to the senior management team, where next steps for individual pupils, as well as groups of pupils are discussed and acted upon.

As part of the ongoing assessment process, teachers record whether pupils have met the learning objective in pupils’ maths books through the use of a stamp. Pupils are provided with verbal feedback, particularly when learning objectives have not been met. Constructive, child-friendly written comments are provided in pupil’s maths books if needed. Pupils use a purple pen for ‘pupil voice’ and ‘fix it’.

Achievement is reported to parents at the two parent consultations during the year and in the end of year reports in July. Specific levels are passed on to parents following Year 2 and Year 6 formal tests.

The subject leader will provide advice for implementation of this guidance and the use of the National Curriculum (2014) and Lancashire Mathematics planning materials. They will ensure resources are available. They will attend training where appropriate and will attend WEB cluster meetings for subject leaders. They will provide in-service training for staff members, keeping them informed on new initiatives and to develop school policy; carry out lesson observations, monitor planning and pupils’ maths books.