

# **Broadbottom C of E Primary School**



## **Mathematics Policy**

**Non-Statutory**

**October 2020**

**(3 Yearly)**

Signed.....

Dated.....

## Broadbottom C of E Primary School

### MISSION STATEMENT

At Broadbottom CE Primary we are extremely proud of our Christian Community School. We welcome everyone, embrace individuality and nurture and empower our pupils. We do this through an engaging curriculum that promotes faith, understanding and skills and is underpinned by Christian and British Values.

#### **We...**

- ✓ Love God, the world, each other and ourselves.
- ✓ Cherish our pupils and act as their champions.
- ✓ Provide safe yet challenging opportunities to learn, blossom and grow.
- ✓ Surround ourselves with fun, laughter, positivity and happiness, creating a place where memories are made.
- ✓ Trust each other to act with integrity and to forgive when we make mistakes.
- ✓ Love Learning and Love Life.
- ✓ Are creative in our thinking, outlook and approach
- ✓ Communicate effectively
- ✓ Have time and patience to develop minds
- ✓ Discover individual sparks to let everyone's light shine.
- ✓ Nurture a love of learning and a belief in oneself.

## School Vision

Broadbottom CE Primary School promises to provide a happy, safe, Christian environment for all pupils to flourish and develop talents, interests, excellent learning attitudes and behaviours.

Our intention is for the learning journey to maximise full academic, social, emotional and physical potentials. We aim to develop life skills, tolerance and resilience, in a school environment that cherishes individuality and positively encourages pupils to shine.

**"Let your light shine," Matthew 5:16**

With Christianity at the heart of our intentions, we aim to:

- Strengthen the spirituality of staff and pupils, whilst creating a culture of high expectations, that is mindful of health and wellbeing
- Provide high quality teaching and learning, that develops individual potential and enriches pupil's lives
- Engage in partnerships that support and serve the school community
- Continue to review and challenge the curriculum for our pupils, to ensure it is relevant for their future workforce needs
- Continually improve performance through evaluation of practice
- Equip children and families with the knowledge, skills, independence and resilience to face future challenges
- Instil traditional values of hard work, courtesy, respect and good behaviour
- Nurture an understanding of how special and unique we are in the eyes of God
- Broaden our knowledge and understanding of world issues and develop courageous advocates who will help others shine
- Link our heritage with overseas charities to support others, as our local community has been supported in the past

## Mathematics Policy 2020

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 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. (National Curriculum 2014)

### Purpose

The purpose of this policy is to describe our practice in Mathematics and the principles upon which this is based.

The aims of the 2014 National Curriculum are for our pupils to:

- Become fluent in the fundamentals of mathematics through varied and frequent practice with complexity increasing over time.
- Develop conceptual understanding and ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically; follow a line of enquiry, conjecture relationships and generalisations.
- Develop an argument, justification and proof by using mathematical language.
- Problem solve by applying knowledge to a variety of routine and non-routine problems. Breaking down problems into simpler steps and persevering in answering.

The National Curriculum sets out year-by-year programmes of study for key stages 1 and 2. This ensures continuity and progression in the teaching of mathematics.

The EYFS Statutory Framework 2014 sets standards for the learning, development and care of children from birth to five years old and supports an integrated approach to early learning. This is supported by the 'Development matters' non statutory guidance.

The EYFS Framework in relation to mathematics aims for our pupils to:

- develop and improve their skills in counting
- understand and use numbers
- calculate simple addition and subtraction problems
- describe shapes, spaces, and measures School Curriculum - Programme of Study

### Planning

We have adopted Power Maths as our scheme for mathematics. This is a DFE recommended scheme, following the mastery approach to Maths – small steps. Alongside this, other resources are used to supplement where necessary. These include: NCETM, White Rose Maths, Nrich, Classroom Secrets and Target Your Maths.

These schemes provide teachers with exemplification for maths objectives and are broken down into fluency, reasoning and problem solving, key aims of the National Curriculum. They support a mastery approach to teaching and learning and have number at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. They support pupils working together as a whole group and provide plenty of time to build reasoning and problem solving elements into the curriculum.

## Teaching and Learning

The approach to the teaching of mathematics within the school is based on:

- a mathematics lesson every day
- lessons split into two parts to allow for a same day teach intervention
- a clear focus on direct, instructional teaching and interactive oral work with both the whole class and smaller ability groups. The curriculum is delivered by class teachers.
- the mastery approach, children start at the same point and move through their learning at their own pace, with challenges provided for greater depth achievers
- regular key skills sessions focusing on fluency and the four operations
- maths passports set up in each year group to check key skills.
- Vocabulary is specifically focused on and highlighted through the use of stem sentences.

Power Maths planning, workbooks and textbooks support daily lesson planning. Concrete resources are used in all year groups to support understanding to support the CPA approach in mastery. Resources from White Rose Maths and Classroom Secrets have been purchased to provide a high level of visual resources as well as Target Your Maths text books, providing extra fluency practice of basic skills.

All teachers are aware of the mastery approach and plan lessons which follow this.

(See lesson design sheet below)

<b>Section of maths teaching</b>	<b>What is happening?</b>	<b>What will the children be doing?</b>	<b>What will the teacher/ta be doing?</b>
Key skills practice	Practice of previously taught keys skills through games, quick fire questioning, TTRS etc Practicing skills for passport	Carrying out activities based on keys skills of maths: Counting, number facts, times tables etc	Facilitating games, asking questions etc
Maths lesson (session 1)	Discussions Ping ponging Whole class problem solving Introduce concept	Demonstrating thinking Working in pairs/groups Using resources to solve problems	Questioning Discussing with children Noting misconceptions Note any children needing extending.
Same day teach (assembly time)	Any children needing extra support kept out of assembly to revisit work 1:1 or in a small group.	Using any resources necessary Discussing concepts	Working with small group
Maths lesson (session 2)	Independent/group work. Fluency, varied fluency, problem solving, reasoning.	Working independently/in groups	Live marking. Moving children on. Picking up misconceptions.

## Cross curricular

Throughout the whole curriculum, opportunities to extend and promote Mathematics should be sought. Nevertheless, the prime focus should be on ensuring mathematical progress delivered discretely or otherwise.

## Calculation Policy

The school follows the Power Maths calculation policy. This is broken down into Reception, Ks1, Lower KS2 and Upper KS2.

## Inclusion and equal opportunities

All children are provided with equal access to the mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.

## Resources

Resources which are not used or required regularly are stored centrally and accessed by teachers at the beginning of a topic.

## Displays

All classrooms must have a working wall relating to the current topic including key vocabulary.

## Review

The mathematics policy will be reviewed annually.