

# St Peter's CE Infant School

## MATHEMATICS POLICY

The Department for Education states in the new national curriculum for September 2014 that:  
Every state-funded school must offer a curriculum which is balanced and broadly based and which:

- promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, and
- prepares pupils at the school for the opportunities, responsibilities and experiences of later life.

### **Introduction:**

This policy has been developed in order to ensure that the teaching of mathematics contributes to the school fulfilling its mission statement:

### **Belonging, Believing, Building a future**

It is our mission for everyone to experience the joy of God's love in their lives as part of St Peter's family through trust and friendships. We aim for everyone to be nurtured and to grow in peace, hope and understanding of God, themselves and one another in order to achieve and live fulfilled lives.

*"May the God of hope fill you with all joy and peace in believing, so that you overflow with hope by the power of the Holy Spirit"*  
(Romans 15:13)

The policy is intrinsically linked with and is informed by other school policies, including:

- Calculation Policy
- Teaching and Learning Policy
- Assessment Policy
- Marking and Feedback Policy
- Early Years Policy
- Special Educational Needs Policy
- Equalities Policy

### **GENERAL APPROACH**

As part of our strategy to raise pupil attainment, this school uses the 'Early Years Foundation Stage Curriculum and 'The national curriculum in England: mathematics programmes of study: key stages 1 and 2' (2013), together with the Abacus Mathematics Toolkit, as a basis for planning teaching and to fulfil the government's statutory requirements; this ensures continuity and progression throughout the school. Our school embraces the statement: "The school curriculum comprises all learning and other experiences that each school plans for its pupils. The national curriculum forms one part of the school curriculum." (2.2, National Curriculum 2013, Key Stages 1-4)

Assessment for Learning, a focus on investigative and problem solving approaches, plus the development of mathematical thinking are at the heart of our school's approach. A rigorous and planned commitment to the development of teacher and teaching assistants' subject knowledge complements and strengthens this.

## AIMS

Our school believes that every child is entitled to a high quality mathematics education, which will provide a foundation for them understanding the world. As a result, they will have an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. It is our belief that our pupils should:

- **become fluent in the fundamentals of mathematics**, so that they:
  - have a well-developed sense of number values
  - know by heart key number facts, e.g. times-tables and related division facts, number bonds – in line with the latest programmes of study
  - apply knowledge of the above to work out connected facts
- **reason mathematically**, so that they:
  - are able to follow a line of enquiry
  - provide generalisations and proof of findings around their investigations
  - are able to justify their thinking, e.g. as to why a particular calculation strategy is the most efficient
- **solve problems by applying their understanding of mathematics**, so that they:
  - encounter a variety of both routine and non-routine problems
  - are able to select specific maths skills and/or operations
  - persevere with a line of enquiry, breaking down increasingly complex problems into a series of smaller steps

## CURRICULUM

In order that our children get a broad and balanced mathematical curriculum, we will ensure that the following domains are covered each year:

- Number:
  - number and place value
  - addition and subtraction
  - multiplication and division
  - fractions, including decimals and percentages
- Measurement
- Geometry
  - properties of shape
  - position and direction
- Algebra (the foundations of algebra will be taught from Key Stage 1)

Our school is committed to fostering positive attitudes towards the subject, whilst ensuring that all pupils develop deep conceptual understanding (in part, through exposure to a range of models and images) and mastery across the domains listed above, and in line with their age group. Teachers will actively diagnose and address perceived 'gaps' in conceptual understanding. How pupil learning is then developed as a result will be monitored. In line with the new curriculum's focus on children making connections, our school will provide regular and stimulating cross curricular enrichment opportunities.

## **ORGANISATION**

In order to respond to latest changes in the mathematical landscape, including the latest inspection framework, we will ensure that:

- Maths provision and impact on learners is evaluated and reviewed regularly via the School Improvement Plan and aligned maths action plan. As part of this process, the maths subject-leader (alongside the senior teacher) will consider evidence from a range of monitoring activities (e.g. planning/book scrutinies, learning walks/observations and pupil voice) to determine next stages of development.
- CPD needs of our staff, including the maths subject-leader and teaching assistants, are regularly reviewed and planned as appropriate. The expectation is that staff attending CPD will be given planned opportunities in staff meetings to cascade key messages.

### **Special Educational Needs (SEN)**

Within the daily mathematics lesson teachers aim to provide activities to support children who may find mathematics difficult. Children with SEN are taught within the daily mathematics lesson and are supported to access learning in all lessons.

Teaching Assistants work collaboratively with class teachers to support groups or individual children. Teaching Assistants feedback to the class teachers when appropriate, to inform evaluations, assessment and future planning.

### **Most able, Gifted and Talented**

Teachers plan using differentiated activities to challenge most able and gifted and talented children. Differentiation may be by outcome, support, resource or sometimes by the lesson input that is given to different groups by the teacher or a teaching assistant. When working with the whole class, teachers differentiate questions to challenge and maintain the involvement of the most able. Children who have been identified as most able gifted and talented are given additional opportunities to extend their learning through problem solving, investigation and open-ended activities.

### **ICT**

The school reviews the software available and computers, interactive whiteboards and tablets are used on a regular basis to enhance the Mathematics curriculum. Interactive whiteboards are also used regularly to support whole class teaching. Calculators are used on occasion for checking and making calculations as well as to enhance understanding of number processes.

### **Homework**

The school recognises the importance of the role of parents and carers in supporting children's mathematical development. Homework activities, linked to the objectives, are sent home in Classes 1 and 2.