



## John Shelton Community Primary School

### Mathematics Policy

#### Introduction

A high-quality mathematics education 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. (National Curriculum 2014)

At John Shelton Primary School we aspire for all children, parents, teachers and Governors to have a love and understanding of maths. For them to recognise that they are surrounded by and use mathematical ideas, not just throughout the school day, but constantly in everyday life. We nurture a 'can do' attitude, where mistakes are seen as learning opportunities, difficulties are met with resilience and challenges are met with perseverance.

The policy is underpinned by all four of the school's core values:  
commitment ~ opportunity ~ respect ~ excellence

#### Aims

We follow the 2014 National Curriculum for mathematics ensuring that all pupils:

- become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time
- develop conceptual understanding and ability to recall and apply their knowledge rapidly and accurately
- reason mathematically – follow a line of enquiry, conjecture about relationships and generalisations
- develop an argument, justification or proof using mathematical language
- solve problems by applying their mathematics to a variety of routine and non-routine problems, breaking down problems into a series of simpler steps and persevering in seeking solutions.

**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

This policy applies to all pupils, regardless of their race, gender, religion or the presence of Special Educational Needs of any sort (including those who are Gifted and Talented). The curriculum is differentiated to ensure that all pupils progress in their learning at an appropriate pace supported by enrichment or reinforcement activities.

## Organisation

In Key Stages 1 and 2, there are five allocated mathematics hours per week. Mathematics in EYFS is taught through an integrated approach.

**Long term 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.

**Medium term planning:** based on ABBC maths – a sequential and progressive exemplification of the curriculum objectives detailing skill development, problem solving and reasoning opportunities. The planning cycle provides longer units on number, calculation, fractions, decimals and percentages to ensure depth of learning, whilst cyclical revisits further enhance and deepen learning.

**Short term planning:** Exemplification in ABBC maths and ongoing assessment supports daily lesson planning. Lessons are planned using a common planning format and are monitored at intervals by the mathematics subject leader. EYFS planning is based on the medium term plans and delivered as appropriate to individual children with thought to where the children are now and what steps they need to take next.

## Teaching and Learning

Children in key stages 1 and 2 are taught in mixed ability classes and have a daily maths session of 60 minutes. 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. Mathematics is taught through an integrated approach.

**Lessons:** In all maths lessons the learning intention and where appropriate context for learning is clearly displayed and discussed. The emphasis in lessons is to make teaching interactive and enjoyable, engaging and responsive to evolving learning needs.

### **Features of lessons include:**

- Instruction – giving information and structuring it well;
- Demonstrating – showing, describing and modelling mathematics using appropriate resources and visual displays;
- Explaining and illustrating – giving accurate and well-paced explanations;
- Questioning and discussion – using Read Write Inc principles and lolly sticks to encourage active participation
- Consolidation – providing purposeful practice and application opportunities
- Reasoning and problem solving - printed on yellow paper and stuck into children's books
- Reflecting and evaluating responses – identifying mistakes and using them as positive teaching points

### **Assessment**

Assessment is an integral part of teaching and learning and is a continuous process.

Teachers make assessments of children through:

- regular marking of work (see Marking Policy)
- analysing errors and picking up on misconceptions
- asking questions and listening to answers
- facilitating and listening to discussions
- making observations
- AFL strategies

These ongoing assessments inform future planning and teaching. Lessons are adapted readily and short term planning evaluated in light of these assessments.

### **Medium term**

Termly assessments are carried out in Years 1 to 5 in the autumn and spring and summer terms using PUMA assessment materials. Year 6 complete half termly past maths SATs papers to track progress. These materials are used alongside judgements made from class work to support teachers in making a judgement for each child, which, in line with the assessment policy, they enter onto Educater.

Pupil Progress meetings are timetabled each term for all classes. Progress of pupils is discussed and appropriate intervention considered and put in place where appropriate.

### **Long term**

Y2 and Y6 complete the national tests (SATs).

### **Intervention programmes**

The Numbers Count intervention programme is led by our Numbers Count teacher and takes place with learners predominately in Years 5 and 6 who are below age related expectations. Children receive either one to one sessions or small group sessions for 30 or 40 minutes three times a week for 40 lessons. These children are then tracked to measure the impact of the intervention. Sandwell diagnostic assessment materials are used to help identify gaps in knowledge, skills and understanding.

There are also less formal interventions, run across different year groups when necessary, where children are not making expected progress. Other interventions will also be supplied as needed.

Year 6 mathematics booster sessions run from the beginning of the Spring term until the KS2 SATs.

Reporting procedures are in line with DfE regulations. Parents receive an annual written report and are invited to two parental interviews throughout the academic year.

**Review date: December 2019**