

# **Sedgley Park Community Primary School**



## **Mathematics Policy**

**November 2017**

**Mr Skelton**

## **Introduction**

At Sedgley Park Community Primary School, we aim to ensure that every child achieves success and that all are enabled to develop their skills in accordance with their level of ability.

Mathematics is both a key skill within school, and a life skill to be utilised throughout every person's day-to-day experiences. It teaches children how to make sense of the world around them through developing their ability to use number, calculate, reason and solve problems. It helps children to understand relationships and patterns in both number and space in their everyday lives.

## **Rationale**

Mathematics is a universal language around the world and equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

The National Curriculum for Mathematics (2014) describes in detail what pupils must learn in each year group. Combined with our Calculation Policy and our Mathematics Progression Framework, this ensures continuity, progression and high expectations for attainment in mathematics.

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

## **Our Principles of Teaching and Learning Mathematics**

Our teachers strive to:

- Build children's confidence and self esteem;
- Develop children's independence;
- Allow all children to experience regular success;
- Use practical approaches to mathematics (models and images);
- Encourage children to select independently resources to help them;
- Challenge children of all abilities;
- Encourage children to enjoy mathematics;
- Develop a child's understanding of mathematical language;
- Learn from teachers, peers and their own mistakes;
- Allow children to ask questions as well as answer them.

We support our children to:

- Develop an enjoyment of learning through practical activity, investigation, exploration; mental exertion and discussion;
- Develop confidence and competence with numbers and the number system;

- Develop the ability to solve problems through connecting ideas, decision-making and applying their use mathematical skills in a range of contexts, including other subjects such as Science and Geography;
- Develop the ability to reason mathematically by following a line of enquiry, developing an argument and making justifications using mathematical language;
- Develop a practical understanding of the ways in which information is gathered and presented;
- Explore features of shape and space, and develop measuring skills in a range of contexts;
- Understand the importance of Mathematics in everyday life, especially in relation to essential life skills such as telling the time and handling money; and
- Foster positive attitudes towards Mathematics by developing pupils confidence, independence, persistence and co-operation skills.

### **Mathematics Curriculum:**

In our Foundation Stage, we use the Early Years Foundation Curriculum to support the teaching of Mathematics and is assessed using the criteria from the Early Learning Goals.

In Key Stage 1, we use medium term plans provided by Tara Maths. These are used in conjunction with our Mathematics Progression Framework, Numicon and the training provided by Tara Maths to ensure the children are given plenty of opportunities for reasoning, problems solving and accessing mastery.

In Key Stage 2, we use the revised White Rose Maths Hub (2017) medium term plans. These are used in conjunction with our Mathematics Progression Framework, Numicon and the training provided by Tara Maths to ensure the children are given plenty of opportunities for reasoning, problems solving and accessing mastery.

### **Organisation:**

Maths is taught for approximately 1 hour per day across Key Stage 1 and 2. Some children will engage in pre- or post- learning sessions to ensure they ready to access the next lesson.

### **Pupil's Record 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.

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.

### **Resources:**

A bank of essential mathematics resources are kept in each classroom. Further resources relating to key whole school topics are kept in maths cupboards. Information and Communication Technology Teachers should use their judgement about when ICT tools should be used, including the use of calculators.

### **Role of the Subject Leader**

- Ensures teachers understand the requirements of the National Curriculum and helps them to plan lessons. Leads by example by setting high standards in their own teaching.
  - Prepares, organises and leads CPD and joint professional development.
  - Works with the SENCO and SLT.
  - Observes colleagues with a view to identifying the support they need.
  - Discusses regularly with the Head Teacher the progress of implementing National Curriculum for Mathematics in school.
- Monitors and evaluates mathematics provision in the school by conducting regular work scrutiny and assessment data analysis.

### **Moderating and review**

Moderating of the standards of children's work and of the quality teaching in mathematics is the responsibility of the mathematics subject leader alongside members of the senior leadership team. The work of the mathematics subject leader also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.