

# Fairchildes Primary School

## Mathematics Policy

### Aims and Objectives

At Fairchildes, we believe that the following incorporate our whole philosophy towards the teaching of mathematics throughout each key stage. Our pupils will:-

- Present maths as a challenging, exciting, creative and relevant subject and in so doing, promote a positive and confident attitude.
- Acquire competence in basic skills, knowledge and understanding, including quick recall of basic facts to develop mathematical fluency.
- Be encouraged to use mathematical facts with confidence.
- Develop clear, logical and systematic approaches, especially with regard to problem solving and reasoning.
- Develop an awareness of the uses of mathematics and its application in everyday life and realise that mathematics is a way of communicating information.
- Develop the ability to use the appropriate language.
- Be encouraged to work collaboratively as well as independently.
- Develop an ability to communicate mathematics.

### Calculation

There is a specific calculation policy outlining the methods used and taught for all four operations across the school. This ensures progression and continuity across year groups and the school when teaching calculation and embeds the knowledge of the four operations. For further information see calculation policy.

### Mental Maths

At Fairchildes we believe that children should be fluent and able to manipulate number and other areas of maths effectively. These are identified and reinforced through each year group's planning, with clear progression through the key stages. From years three to six a particular emphasis is placed on fluency in all times tables up to  $12 \times 12$ .

### Using and Applying

In order for children to become fluent mathematicians, they need to be able to reason mathematically and solve problems by applying their mathematical skills. These include: word problems, every possibility problems, logic problems, rules and pattern problems, multiple answer problems, and problems introducing algebra. The children are specifically taught the problem solving skills so that they can identify which is best suited to solve the problem. These skills are: visualising, trial and improvement, conjecture, reasoning, pattern spotting, working backwards and working systematically. Teachers will ensure that planning and lesson delivery will have using and applying opportunities wherever possible.

### Cross-Curricular Mathematics

There are many opportunities for developing mathematical skills across the whole school curriculum. Teachers seek to take advantage of all opportunities. Very specific opportunities arise in science, computer science and geography.

### **Inclusion**

As teachers we are aware of, and respond to, pupils' diverse learning needs, including those with English as an additional language, those with learning difficulties and the able, gifted and talented pupils.

SEN/EAL pupils will be included, using support. Children identified as having Special Needs will be supported through work with a teaching assistant, either individually or within a small, focused group. This may include a particular intervention programme.

Teachers will plan for Able, Gifted and Talented children, specifying suitable strategies/activities that are appropriate, e.g. higher order questions, challenging activities etc. For further guidance see the inclusion policy.

### **Homework**

Children are encouraged to practice mental mathematics skills such as calculation, times tables, number bonds etc. In line with the school's homework document, specific homework will not be given. However, access to online maths resources such as Mathletics is encouraged daily for all pupils.

### **Assessment**

In the Foundation Stage children are assessed on the six areas of learning as stated in the Early Learning Goals, via observation and the Foundation Stage Record.

At Key Stage 1 and 2 children are assessed against the National Curriculum 2014. Assessment is predominately through assessment for learning which enables children to see themselves as learners and take responsibility and control of their own development. Teachers use AFL to inform their planning, evaluate lessons and to give next steps to children through giving verbal and written targets in marking.

In addition, summative assessment takes place each half term. Children will complete a maths quiz based on that half terms learning. Lessons also incorporate times tables tests and maths star tests to further develop fluency. At the end of KS1 and 2, children will be entered in statutory tests in line with government policy. For further details see the assessment policy.