

## Netherfield Infant and Nursery School

### Mathematics

#### Aims

- To promote positive attitudes and an enjoyment of maths
- To promote an awareness of how maths is involved in our daily lives
- To develop a range of calculation skills and to encourage confidence and competence to apply what has been learned to new situations
- To teach children a wide mathematical vocabulary and to develop familiarity with, and correct use of mathematical language and symbols
- To encourage children to talk about their methods and explain their reasoning when solving problems
- To ensure children learn new mathematical concepts through practical activity built upon current understanding
- To develop children's skill at working mentally and encourage quick and accurate recall of learned facts

## Objectives

For children to be able to:-

- use their increasing mathematical understanding to enhance their daily lives
- develop flexible approaches to problem solving and look for ways to overcome difficulties
- explain their methods and reasoning
- communicate mathematically in an increasingly competent manner
- begin to count small numbers of objects reliably, building up their knowledge to extend counting to 100 and beyond
- read and write numbers.
- understand number operations, addition, subtraction, multiplication, division and the relationship between them
- develop rapid recall of number facts and the range of mental methods for finding, from known facts, those they cannot recall
- carry out simple calculations, choose appropriate methods to solve problems and check that their answers are reasonable, and explain their methods
- record their methods in a jotter
- select appropriate equipment and materials
- recognise simple patterns and relationships and make predictions about them
- recognise, name and describe the properties of 2-D and 3-D shapes
- observe, visualise and describe positions, directions and movements using common words
- make estimations and order objects by direct comparison using appropriate language
- measure and weigh objects using appropriate instruments
- use ICT in an appropriate mathematical context

## Scheme of work

Children will be taught according to programmes of study in the National Numeracy Strategy framework, staff will make reference to this in their weekly planning. To supplement this, staff will use ideas from and refer to the calculations policy and a variety of other published material. Staff will not strictly follow a published scheme of work to the exclusion of all others.

Children will be taught the prescribed objectives in a variety of different ways with the emphasis being on practical activities and learning through investigation. They will use mathematical ideas and record these using objects, pictures, diagrams, words, numbers and symbols. Staff will use their professional judgement when deciding the right time for children to begin formal methods of recording.

All maths lessons will engage the children in working mentally to encourage mental and visual images of numbers, shapes and space and their relationship to each other. From the beginning of KS1 children will record calculations in a jotter. These do not need to be formally marked but the objective may be written on and dated. Children will explore and use a range of resources to support their learning, including ICT where appropriate. Children in KS1 will take part in a formally assessed number activity each term.

The teacher will put a dot next to an incorrect answer, to inform the child of a need to try again. Wherever possible incorrect answers should be discussed with the child.