

# Problem Solving

Problem solving is finding a way to apply the knowledge and skills you have to answer unfamiliar types of problems. It is having the ability to make choices, interpret, make links, investigate and form solutions using a range of mathematical knowledge and skills.

# Understanding Number and Calculation

The basis of mathematics is formed by numbers. A number is a value used to represent a quantity and can be used to count, measure and label. Developing good number sense means understanding the order and value of these numbers. Children develop their understanding of number by investigating how numbers are made and their role in the real world. We can use these numbers to calculate, which involves working out the amount or number of something, usually by using one of the four operations – addition, subtraction, multiplication or division.

# Enquiry

This involves applying the use of a range of knowledge, skills and strategies to plan investigations and approaches to help find solutions to problems. Skills involved are questioning, generalising, making links, using known facts and proving.

# Reasoning

Reasoning in maths is the process of applying logical thinking to find the correct problem solving strategy for a given question, and using this method to develop and describe a solution. Mathematical reasoning is the bridge between fluency and problem solving and requires children to use gained skills and fluency to make the choices needed to solve a problem.

## Pattern

A pattern is a repeated design or recurring sequence. This could be an ordered set of numbers, shapes or mathematical objects arranged according to a rule.

## Geometry

Geometry is a branch of mathematics concerned with questions of shape, size, the position of figures and the properties of space.

## Statistics

Statistics is the study of collection, analysis, interpretation, presentation and organisation of data.

## Measure

Measure is a number that shows the size or amount of something. Usually, the number is in reference to some standard measurement of length, weight, capacity, time or money

## Shape and Space

Shape and space refers to the properties of objects and the consequences of how these objects are positioned. Space is a set with added structure. Shape is the form of an object and how it is laid out in space.

## Algebra

Algebra is a branch of mathematics dealing with symbols and the rules for manipulating those symbols.

