Glenthorne Community Primary School

Mathematics Policy

Aims

The national curriculum for mathematics aims to ensure that all pupils:

-become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

-**reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

-can **solve problems** by applying their mathematics to a variety of routine and non routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Glenthorne's Aims

Using the Programmes of Study from the National Curriculum and the Mathematics Primary Framework it is our aim to develop:

-a positive attitude towards mathematics
-competence and confidence in mathematical knowledge, concepts and skills
-an ability to solve problems to reason, to think logically and to work systematically and accurately
-initiative and an ability to work both independently and in cooperation with others
-an ability to communicate mathematics
-an ability to use and apply mathematics across the curriculum and in real life
-an understanding of mathematics through a process of enquiry and experiment

Breadth of Study

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for:

-practical activities and mathematical games
-problem solving
-individual, group and whole class discussions and activities open and closed tasks
-a range of methods of calculating e.g. mental, pencil and paper and using a calculator
-working with computers as a mathematical tool

Problem Solving approach

At Glenthorne, we use the RUCSAC approach as the overarching process to teach pupils to solve mathematical problems. The posters are on display in every classroom, from Nursery through to Year Six. In each year group, children should refer to RUCSAC when discussing how problems should be approached.

The six step process is as follows:

-**Read** the question carefully.   What is the important information?
-**Underline** the key words – what is this question asking you to do?
-**Choose** which calculation you will need to do.
-**Solve** the problem, make sure you follow all the steps.
-**Answer** the question and record your answer in the correct place.
-**Check** your calculation for any mistakes.