Mathematics

At Swinton Queen Primary School we teach Mathematics to meet the statutory requirements of the National Curriculum 2014. We deliver Mathematics in a manner which is stimulating, interesting, varied and exciting for all children. As a result, children should develop a positive attitude and enthusiasm for the subject.

Aims

Through our provision, we aim for children to:

* Have a sense of the size of a number and where it fits into the number system.
*Have an understanding of the links between the 4 operations
*Make connections between areas of Maths such as the links between fractions, decimals and percentages.
*Know by heart and develop rapid recall of number facts such as times tables (up to 12x12)
*Use what they know by heart to calculate mentally
*Calculate accurately and efficiently, both mentally and in writing and will leave our school with an efficient and reliable written method for each operation.
*Will be able to apply their mathematical knowledge to solve problems by choosing the appropriate strategy and operations.
* Explain their methods and reasoning using correct mathematical vocabulary
*Suggest suitable units for measuring and make sensible estimates of measurements.
* Explain and make predictions from the data in graphs, diagrams, charts and tables.
* Develop spatial awareness and an understanding of the properties of 2d and 3d shapes.

To support the teaching and learning of recall of number facts (times tables etc) we use Maths Passport. Maths Passport is a whole school initiative. Children work through passports for various countries and continents. Each passport contains objectives that are specifically for number facts. These targets become progressively more challenging. The passports track progression in basic number skills. The children will develop instant recall skills in all the objectives.

To emphasise the importance we place on problem solving, one lesson each week is dedicated to teaching problem solving strategies. Children apply their mathematical knowledge in a problem solving context.

Mathematics in The Early Years Foundation Stage

In Foundation Stage One, the main focus of teaching is the three Prime Areas of learning. However, staff plan activities in provision areas (sand, water, role play etc) to develop children's understanding of number and problem solving. In Foundation Stage Two, children receive a daily teaching input- activities are then planned for the children to practise the skills they have been taught as well as to apply them independently.

Key Stage One

Children in Key Stage One are taught Mathematics every day. During each lesson children have the opportunity to practise number facts etc. Children are taught the place of numbers in the number system (place value), calculation and fractions. Other areas that are taught are: Measurement (describing and comparing different quantities eg: length, mass, capacity, volume, time and money), Geometry (shape and space) and statistics. Wherever possible, mathematics is linked to everyday situations. One lesson each week is devoted to teaching the problem solving strategies. (More information can be found in our Problem Solving Policy). At the end of Key Stage One (Year Two), children's learning will be assessed through the National Curriculum Tests.

Key Stage Two

As in Key Stage One, children are taught Mathematics daily. Children build on their skills and knowledge from Key Stage One. As well as the areas taught in Key Stage One. Children will also be taught decimals and percentages, Ratio and Proportion and Algebra. Mathematics may also be taught in other curriculum areas such as Science and Geography. Throughout Key Stage Two, more problem solving strategies are taught. (Please see the Problem Solving Policy). At the end of Key Stage Two (Year Six), children will sit National Curriculum Tests.

By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.
Pupils should read, spell and pronounce mathematical vocabulary correctly.

Attach NC for Mathematics (Statutory Requirements)

Attach Overview for Maths (what we teach when)

Attach Calculation Policy (Strategies we use)

Attach Problem Solving Policy

Attach Passport objectives