

Support for Learning

“Pupils should be given opportunities to apply and develop their ICT capability through the use of ICT tools to support their learning in subjects”.

(The National Curriculum 2000)

The use of ICT needs to add value to teaching and learning in **Mathematics**. Identifying “when, when not and how” to use ICT in a way that enhances pupils’ learning has implications for the teacher.

ICT impacts on pupils’ learning in **Mathematics** because it can help to develop concepts and critical thinking skills. Using data handling and spreadsheet software, pupils can make predictions, experiment with data (including real data) and form conclusions. ICT enables pupils to analyse results quickly and efficiently, for example, in interpreting a graph they have plotted using survey data. In exploring mathematical problems, pupils can use ICT to observe, investigate and explain patterns in numbers, shapes and data, and make connections.

ICT opportunities in the Mathematics programme of study

During Key Stage 1, pupils learn to count, read, write and order numbers. They develop a range of mental calculation skills, and learn about shape and space.

At Key Stage 2, they develop efficient calculation strategies, and an understanding of measuring, shape and space and data handling. They solve increasingly complex problems, and explain methods and reasoning using charts and diagrams.

In developing knowledge, skills and understanding, pupils can use software and hardware to:

- calculate and make connections
- find things out and sort data
- program a robot to follow a route
- control on-screen turtles and build programs
- explore modelling
- create repeating patterns such as tessellations
- create and draw 2-D and 3-D shapes
- recognise reflective symmetry and geometrical features
- investigate mathematical relationships
- plot graphs and interpret information.



LOGOTRON PRODUCTS FOR MATHEMATICS

BBC Maths Workshop

KS2 P3-P6

Comprises three separate programs: Number, Calculation and Measures, Shape and Space. This series has been designed specifically to prepare pupils for the 10-minute mental calculations and daily maths lesson. BBC Maths Workshop is ideal for whole-class teaching, and for individual learning. Differentiated exercises and individual pupil reports enable teachers to track progress.



Logotron Visual Fractions

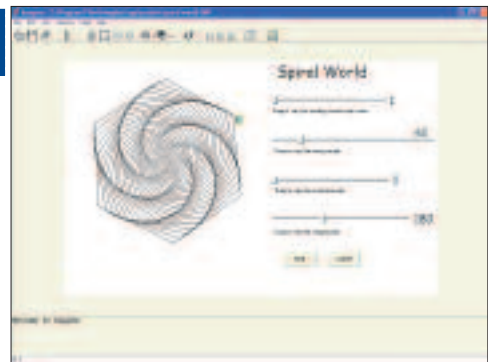
KS2 P3-P6

This program offers a unique visual representation of fractions and a wealth of pre-prepared activities. Logotron Visual Fractions helps pupils understand the behaviour of fractions, decimals, percentages, ratio, picture fractions, group fractions and more. It is ideal for Interactive Whiteboards and whole-class teaching.

Imagine Logo

KS1-3 P3-S2

SuperLogo for the 21st Century. Imagine Logo is the most powerful logo environment to date, with tools such as variable sliders, buttons and text facility making it ideal for maths investigations. A configurable environment (and state-of-the-art speech recognition) means that logo is now accessible to all users. Original logo-based projects and investigations, enhanced by multi-media elements, can be published to the web as truly interactive web pages.



Junior Viewpoint

KS2-3 P3-S2

The entire data handling strand of the curriculum can be delivered with Junior Viewpoint. From designing forms, entering data, searching and sorting data, carrying out statistical operations to preparing graphs and reports, Junior Viewpoint offers it all in one simple to use program.

Early Essentials

KS1 P1-P2

The applications: Chart, Graph and Turtle offer a superb introduction to embedding ICT in Maths. Pupils are introduced to turtle geometry, in a differentiated and progression-friendly environment. A wide range of contextualised projects allows pupils to explore and understand pictograms, bar graphs, pie charts, line graphs and scatter grams. A friendly child's voice is at hand to help the user throughout, making this a safe environment for early maths investigations.

