

## 6 Mathematics Programme of Study: Key stage 3

Some explicit references to the use of ICT are given below. These quotes are not meant to imply that these are the only uses of ICT. They are just a selection of examples to promote discussion.

**Under Key Concepts**, the programme of study states that:

- Pupils should be familiar with a range of resources and tools, including graphic calculators, dynamic geometry and spreadsheets, which can be used to work on mathematics.

**Under Key Processes**, the programme of study states that:

- **Representing:**  
Pupils should be able to select mathematical information, methods and tools to use. ICT tools can be used for mathematical applications, including iteration and algorithms.
- **Analysing:**  
  
***Use mathematical reasoning:*** Pupils should be able to explore the effects of varying values and look for invariance and covariance. This involves changing values to explore a situation, including the use of ICT (e.g. to explore statistical situations with underlying random or systematic variation).  
  
***Use appropriate mathematical procedures:*** Pupils should be able to use accurate notation, including correct syntax when using ICT to record methods, solutions and conclusions estimate, approximate and check working. This includes representing the results of analyses in various ways (e.g. tables, diagrams and symbolic representation).
- **Interpreting and evaluating:**  
Pupils should be aware of the strength of empirical evidence and appreciate the difference between evidence and proof. This includes evidence gathered when using ICT to explore cases.
- **Communicating and reflecting:**  
Pupils should be able to consider the elegance and efficiency of alternative solutions. These include solutions using ICT

**Under Curriculum opportunities** the programme of study states that:

- The curriculum should provide opportunities for pupils to become familiar with a range of resources including ICT so that they can select appropriately. This includes using practical resources and ICT such as spreadsheets, dynamic geometry, graphing software and calculators, to develop mathematical ideas.

See: <http://curriculum.qca.org.uk/subjects/mathematics/keystage3/>