



COMPUTING

The computing curriculum for Primary age children can be separated into three key areas: Computer Science, Information Technology and Digital Literacy.

Computer Science – how digital systems work (e.g. the internet) and how to show this knowledge through use of programming.

Information Technology – creating programs of their own which include a range of content.

Digital Literacy - using technology purposefully to create, organise, store, manipulate and retrieve digital content.

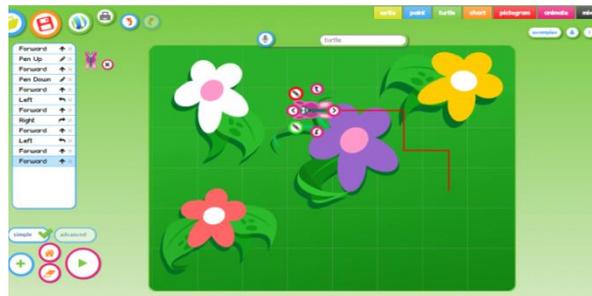
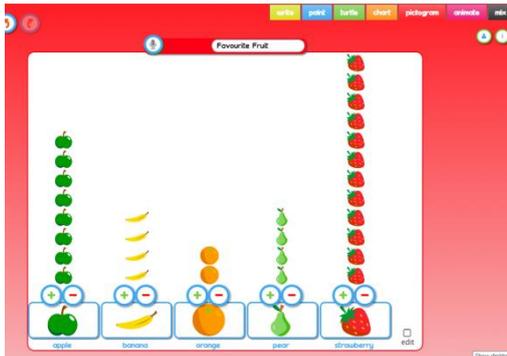
The National Curriculum requirements for Key stage 1 are that pupils are taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Computing skills are used at Maple Infants' School to allow the children to access learning across the curriculum.

We are lucky enough to be part of the *London Grid for Learning* network, which allows us access to a number of resources. A valuable teaching tool used in Key Stage One is **JIT** - an online infant tool kit, which covers:

- Animation
- Graphing
- Painting
- Pictogram
- Turtle control



In the **Early Years**, children explore computing through role-play of technology in realistic scenarios (for example, shops). We discover different uses of technology and how to use it safely and respectfully. Children also have access to **busythings** (also through LGFL) – a website which supports them in all areas of learning, as well as providing our younger learners with fundamental mouse and keyboard skills.



As a school, we highly value the importance of **online safety**. We protect and educate pupils in their use of technology through regular e-safety sessions during computing lessons.

Here are some websites that we recommend to enhance your child's fundamental computer skills:

- Keyboard skills for beginners:

<http://www.bigbrownbear.co.uk/keyboard/>

- More advanced keyboard skills:

<http://bigbrownbear.co.uk/learntotype/>

- Using a mouse with control:

<http://primarygamesarena.com/Play/Catching-Apples-397>

- A child-friendly search engine:

<http://www.kidrex.org/>

- E-safety information to look at with your child:

<http://www.kidsmart.org.uk/>

Computing Glossary

(Here is some common vocabulary you may hear your child using at home.)

Algorithm – an unambiguous procedure or precise step-by-step guide to solve a problem or achieve a particular objective.

Debug – to detect and correct the errors in a computer program.

Digital content – any media created, edited or viewed on a computer, such as text (including the hypertext of a web page), images, sound, video (including animation), or virtual environments, and combinations of these (i.e. multimedia).

Input – data provided to a computer system, such as via a keyboard, mouse, microphone, camera or physical sensors.

Internet – the global collection of computer networks and their connections, all using shared protocols (TCP/IP) to communicate.

Output – the information produced by a computer system for its user, typically on a screen, through speakers or on a printer, but possibly through the control of motors in physical systems.

Program – a stored set of instructions encoded in a language understood by the computer that does some form of computation, processing input and/or stored data to generate output.

Repetition – a programming construct in which one or more instructions are repeated, perhaps a certain number of times, until a condition is satisfied or until the program is stopped.

Search (Search engines) – to identify data that satisfies one or more conditions, such as web pages containing supplied keywords, or files on a computer with certain properties.

Sequence – to place programming instructions in order, with each executed one after the other.

Software – computer programs, including both application software (such as office programs, web browsers, media editors and games) and the computer operating system. The term also applies to 'apps' running on mobile devices and to web-based services.

World Wide Web – a service provided by computers connected to the Internet (web servers), in which pages of hypertext (web pages) are transmitted to users; the pages typically include links to other web pages and may be generated by programs automatically.