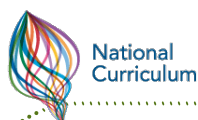# iCompute

iNetwork
Year 6

Overview

This unit explores how computer networks connect people in ways that allow them to work together and share information and resources.

In includes investigating how the internet and internet search engines work by engaging the children in physical activities that model the connections and processes involved as well as by using networks to create web pages.

National Curriculum

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Curriculum Links

- Geography
- Art
- D&T
- Science

Objectives

Lesson	Title	National Curriculum Links	Objectives	Success Criteria	Vocabulary
6.4.1	iConnect	✴ understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	✴ To understand that a computer network is a group of computers that are connected ✴ To know that computer networks allow users to communicate and share	✴ The children can model a network using physical materials	network; internet; wired; wireless; data; devices; communicate; connected; LAN; WAN; network switch; router
6.4.2	iRoute		✴ To understand that the internet is many networks that are connected to each other ✴ To know that a router sends/receives information as packets of data	✴ The children can draw the Internet (a network of networks)	network; connect; internet; router; packet; data; address
6.4.3	iTrace		✴ To know that computers connected to the Internet have their own address ✴ To understand that services involving web pages on the internet are known as the World Wide Web and that websites can be traced to a particular webserver	✴ The children can trace the route a request takes to reach a website	IP address; router; website; webserver; trace; url; World Wide Web; Internet Service Providers (ISP)
6.4.4	iSearch		✴ To know that internet search engines maintain, and rank, a list (or index) of other websites available on the world wide web ✴ To use clear search terms when conducting internet searches in order to find things out	✴ The children use the world wide web to answer questions on an online quiz	internet; world wide web; search engine; index; ranking; search terms; spider; crawling; algorithm
6.4.5 2 sessions	iCreate		✴ To know that web pages are written in HTML ✴ To recognise and use basic HTML syntax	✴ The children can use basic HTML and simple CSS (styling) to create web content	Website; web page; browser; world wide web; hyperlink; image link; HTML; CSS; tags; URL; copyright