



Coleman Primary School

Key Knowledge Organiser: Year 5- Spring 2

Computing: WE ARE WEB DEVELOPERS

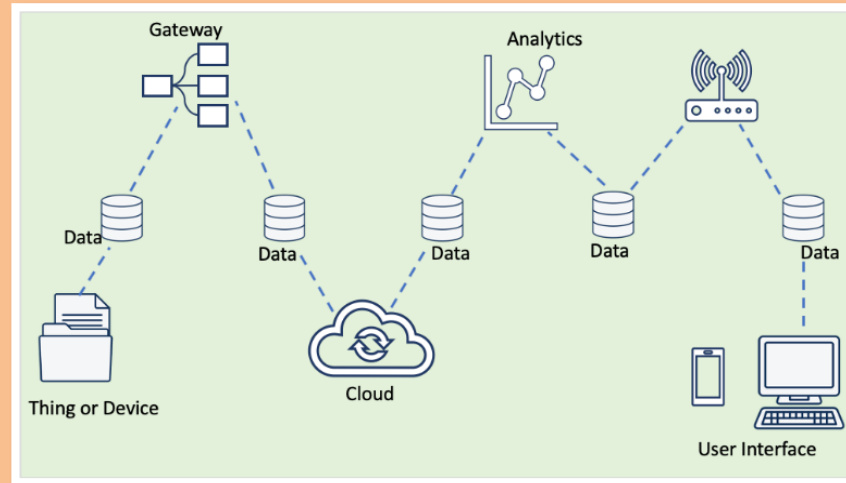
In this unit, pupils begin by learning how the school network and the Internet work. They explore the HTML used to create websites and edit this using Chrome Developer Tools. They create their own website about online safety using Google Sites. In:

- Session 1 they learn about the school network and how it connects to the Internet
- Session 2 they learn how messages are passed on the Internet
- Session 3 they learn how web pages are built of HTML
- Session 4 they plan an online safety website
- Session 5 they write pages for their site
- Session 6 they add links and media to their site.

Key Vocabulary

Images:

Packets of data	A small set of numbers that get transmitted together via the internet, typically enough for 1000 or 1500 characters
Protocol	A set of agreed rules and procedures for communication
Tag	Component of HTML to show the purpose of the following text, such as a link, paragraph text or image
Uniform Resource Locator (URL)	A standard for specifying the location on the internet of certain data files
Web browser	Program running on a user's computer which requests and displays web pages using HTTP
Web server	Computer connected to the internet that stores web pages, transmitting these to web browsers as HTTP requests are received
World Wide Web	The HTML and other documents stored on individual web servers connected via the internet and accessible via HTTP
Creative commons	Copyright licensing scheme where the creator of an original of an original work allows others to use it without seeking further permission, subject to a number of agreed conditions
Hyperlink	Text or images that, when clicked, opens another page or moves to another part of the document
Hypertext mark-up language (HTML)	Predominant language for web pages



Hypertext transfer protocol (HTTP)	Standard protocol for the request and transmission of HTML web pages between browser and web server	<u>Key skills learnt prior to this unit</u>	<u>Key skills learnt in this unit</u>
Internet	global network connecting computers and local networks using automated switches	<u>Year one</u> <ul style="list-style-type: none"> • understand algorithms as sequences of instructions and how algorithms are implemented as programs on digital devices • create and debug simple programs • use reasoning to predict the behaviour of simple programs. 	<ul style="list-style-type: none"> • the name and function of components making up the school’s network • how information is passed between the components that make up the Internet
Internet protocol (IP) addresses	Numeric addresses uniquely specifying computers directly connected to the internet	<u>Year two</u> <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • what the source code for a web page looks like and how it can be edited • how a website can be structured
Network switch	Dedicated computer hardware that routes data packets to particular connections according to their IP address header	<u>Year three</u> <ul style="list-style-type: none"> • design, write and debug programs • use sequence in programs; work with various forms of output • begin to use reasoning to explain how some simple algorithms work and to detect errors in programs • begin to understand computer networks including the internet and how they can provide multiple services, such as the World Wide Web <u>Year four</u> <ul style="list-style-type: none"> • design, write and debug programs that accomplish specific goals • use sequence and repetition in programs; work with inputs and outputs • use reasoning to explain how some simple algorithms work and to detect and correct errors in programs • begin to understand computer networks including the internet and how they can provide multiple services, such as the World Wide Web 	<ul style="list-style-type: none"> • how to add content to a web page.