Computing Learning Journey
Year 5 Spring Term Second Half

5.4 We are web developers

Making sense of the Internet and building a website

Add relevant links and media to their pages.

Create content collaboratively for a website.

Plan a website about online safety

Understand how web pages are written in HTML

Understand how messages are routed across a network.

Understand the components of the school's network

Key Vocabulary

- **Creative Commons:** copyright licensing scheme where the creator of an original work allows others to use it without seeking further permission, subject to a number of agreed conditions
- **Hyperlinks:** 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
- **Internet:** global network connecting computers and local networks using automated switches, routers and fibre optic, copper wire and radio connections
- **Internet Protocol (IP) addresses:** numeric addresses uniquely specifying computers directly connected to the Internet
- **Network switch:** dedicated computer hardware that routes data packets to particular connections according to their IP address header
- **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

Software: Google Chrome, Google Sites
Hardware: Laptop/ desktop/Chromebook computers or tablets

Switched on Online Safety Unit:
<u>Keeping Information Safe</u>
Unit 5.4 – We are protecting our online reputation: Developing strategies to protect our future selves

Online safety:
We learn that the Internet is resilient to attack, but that there is no overall control of the content or privacy for information. It is important that we realise that not everything published online can be trusted. We think carefully about whether the information they find is trustworthy.

Unit overview:
The children will learn to:

- the name and function of components making up the school's network
- how information is passed between the components that make up the **Internet**
- what the source code for a web page looks like and how it can be edited
- how a website can be structured
- how to add content to a web page.

In Key Stage 1:

- In **Unit 1.4: We are publishers** pupils produced an eBook.
- In **Unit 2.4: We are researchers** pupils learned to access online content.

In Key Stage 2:

- In **Unit 3.5: We are co-authors** pupils created online text.
- In **Unit 4.4: We are bloggers** pupils created content for the Internet.
- In **Unit 5.2: We are cryptographers**, pupils learned ways that information can be protected when transmitted.
- In **Unit 6.3: We are publishers** pupils will return to collaboratively planning.
- In **Unit 6.4: We are connected** pupils will revisit online safety.