

Knowledge Organiser for Year 4

Big question: How accurate is the information we find on the internet?

KS2 National curriculum specification

- Pupils understand that computers (in various forms) generally accept inputs and produce outputs and can give examples of this.
- Pupils recognise - and can describe - some of the services offered by the Internet, especially those used for communication and collaboration.



In this unit, the children will:

Describe how networks physically connect to other networks.

Recognise how networked devices make up the internet.


Outline how websites can be shared via the WWW.



Describe how content can be added and accessed on the WWW.


Recognise how the content of the WWW is created by people.

Evaluate the consequences of unreliable content.

Key vocabulary:

Networks	Networks connect different devices to one another, allowing for information sharing. They can also connect to other networks in different places using a router.
Router	Something that finds a route between networks connecting them. 
Internet	A network of networks, that is used around the world to share information and communicate.

	
World wide web	A system on the internet that has websites and webpages.
Security	<p>Networks have security features that mean they can block or allow messages and requests. This means that information and data can be kept safe.</p> 
Websites	A set of webpages
Webpages	May contain different features e.g. title, links to other pages, images, videos and text.
Browser	A computer program used to access the World Wide Web (e.g. you can use chrome, safari, internet explorer browsers to search on the WWW).
Domain	<p>Websites and webpages can be found using web addresses (domains), normally split into three parts:</p> <ol style="list-style-type: none"> 1. www 2. Name of the organisation/topic 3. Type of organisation/location
Reliable	Accurate and trustworthy.

The World Wide Web	Ownership and Reliability
<ul style="list-style-type: none"> -The World Wide Web is the part of the internet where we can visit web pages and websites. -Information can be shared in the form of things we can see or hear (e.g. things we can read, music, sounds, or videos, etc.). -When we use the world wide web, routers help us to journey to different networks in different parts of the world. -We can use traceroute tools to track the journey between routers. -Web browsers, e.g. Google Chrome and Internet Explorer, let us look at different pages on the internet. 	<ul style="list-style-type: none"> -The content on the internet may belong to different people or companies, for example the person who wrote it or the company who published it. -The content may be copyrighted, meaning that others cannot copy or use it without permission. -Not all of the information that we see or hear on the internet is reliable. Some of it may be inaccurate due to people lying or misunderstanding things. -Inaccurate information can quickly spread. This has become known as 'fake news.' We should check multiple sources that we can trust to verify information. 

Teacher Subject Knowledge:	
Prior Knowledge & progression	This unit progresses students' knowledge and understanding of networks from that developed in the <u>Year 3 Connecting Computers unit</u> . In Year 5, they will continue to develop their knowledge and understanding of computing systems and understand how search engines work via the internet and the world wide

	web.
Misconceptions	<p>A key misconception pupils face within this unit is that the internet and the World Wide Web are the same thing, which they are not. The internet is a global system of computer networks, whereas the World Wide Web is an application that runs on the internet, which can be accessed through websites. When looking at the World Wide Web, learners may confuse search engines and browsers. Some learners may confuse Google as a browser, that 'Google' is needed to access the internet. However, a browser is a piece of software that retrieves and displays web pages, such as Chrome, Firefox, etc. In contrast, Google is a search engine that uses crawlers to find specific information on the web.</p> <p>You may also need to address the many misconceptions around trusting what learners see on the internet, and the issues of fake news. There is a high volume of inaccurate, misleading, or false content on the internet, which learners need to be aware of, alongside the fact search results can be influenced by adverts and sponsored content.</p>
Resources	<p>Teachers will need a knowledge of computer networks, including how data is routed around the internet. Teachers will need to be aware that the World Wide Web is one of many services which are offered over the internet. They will need to know the difference between a web page and a website, and a knowledge of where websites are stored. A knowledge of what content you can find on websites will also be useful. An awareness of copyright (and the reasons for it) and that people create and share false and inaccurate information is important for the last two lessons in this unit.</p> <p>The YouTube video titled 'A Packet's Tale' (www.youtube.com/watch?v=ewrBaT_eBM) provides an overview of networks and the internet. That the World Wide Web is part of the internet is explained in this video: www.bbc.co.uk/newsround/47523993</p>