Coley Primary School – Knowledge Organiser

SUBJECT FOCUS:	Computing: Networks and e-safety	YEAR	5

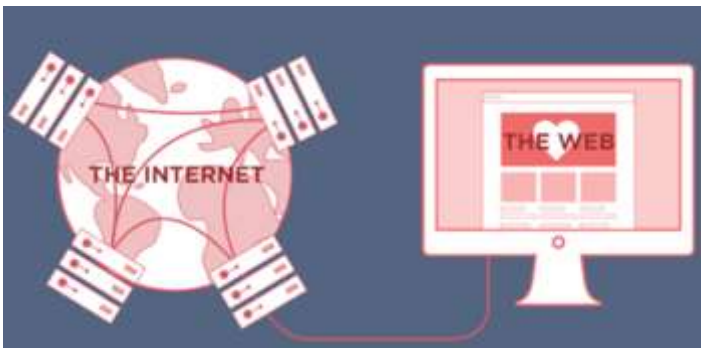
Prior learning: uses of the internet, consent, passwords and privacy, personal information web-browsers, finding websites, bookmarks and favourites, being kind online, not everything on the internet is true, search engines using keywords to search, choosing a site from search rankings, privacy settings, age-ratings and acceptable behaviour when online gaming, 'S' Safe 'A' accept 'R' reliable the 'T' Tell parts of our **SMART rules.**

Links: PSHE Online safety - Pupils should know how information and data is shared and used online; the rules and principles for keeping safe online; how to recognise risks, harmful content and contact, and how to report them

Key knowledge

Networks: the internet and the world-wide-web

Many people think that the internet and the world wide web are the same thing. While they are closely linked, they are very different systems. The **internet** is a huge **network** of computers all connected together. The **world wide web** ('www' or 'web' for short) is a **collection of webpages** found on this network of computers. Your web browser uses the internet to access the web.



	Internet	World Wide Web
Approx. date of creation	1969	1989
Invented by	dozens of scientists, programmers and engineers	Tim Berners-Lee (he also made the first web-browser and web server)
Made up of	Network of Computers, copper wires, fibre-optic cables & wireless networks	Files, folders & documents stored in various computers
What it needs to work	This is the base – it works independent of the world wide web	Depends on the internet to work
Nature	hardware	software

Vocabulary

network - a group of two or more computer systems linked together

internet – global network of connected computers

world wide web – collection of billions of web-pages found on the internet

server - a computer where files are stored which can be accessed via the internet using HTTP

HTTP – stands for **h**yper**t**ext **t**ransfer **p**rotocol. Allows documents to be requested and transmitted between browsers and web servers via the internet

hardware – the physical parts of a computer or network

software – programs that can run on a computer

data – digital information

filters – a program that can check a webpage to see if it should be displayed to the user.

pop ups - small windows that 'pop up' over the top of web pages in your internet browser.

virus – a type of nasty computer program which gets onto your computer without you knowing and can attack your device

Sharing information and images

The internet is a great way to connect with people and can be a lot of fun. Whenever you put a picture, video or information of yourself on the world wide web, it could be seen by anyone who has access to that webpage. They can download or screenshot it, so it be in someone's possession even if you later delete it. You need to think carefully about what you share online. Use the 'Grandmother Rule': 'would I mind if my grandmther saw this?'. Check that your **privacy settings** prevent anyone you don't know from seeing your information. Your **personal data** belongs to you. You should never give it away to someone who asks for it in an email, message or chat room. No one should share your personal information without your permission.

Pop ups

Pop-ups are small internet windows that pop up on your screen can be annoying or dangerous – often used by advertisers to get your attention or by viruses to trick you into clicking on them. All of the major web browsers have pop-up blockers. To stop pop-ups in Microsoft's Internet Explorer 8, go to the Tools menu, select 'Pop-up Blocker' and then 'Turn On Pop-up Blocker'. Not all pop-ups are dangerous; sometimes pop-ups appear when you need to download or install something from a web page.





Viruses

This is a type of computer program that, when you click on it, spreads in your computer. It can change programs you already have on your computer and change how your computer behaves. It can stop your device from running or steal your data. To avoid viruses, do not click on pop-ups or attachments to emails you do not trust. There is software which can scan your devices for viruses and remove them.



A computer virus attacking a computer system

How should we behave online?

- Remember the **SMART rules**
- Make passwords strong and keep them private
- Know who you're talking to: not everyone is who they say they are online
- Respect yourself and others
  - Don't share personal information
  - Get others' consent before you share photos/ videos
  - Block people who are being unkind
  - Report unkind or worrying behaviour if it continues
- Illegal behaviour should be reported to the police www.ceop.org
- Sharing your worries with an adult is not 'snitching': adults want to keep you safe
- Call out bullying when you see it and stand up for others
- Limit screen time: the internet is fun but to stay physically and mentally healthy we need to have a balance of activities

Can you …?

Explain the differences between the internet and the world wide web?

List some examples of personal data and why you should keep it private

Describe the Grandmother Rule

Identify the benefits of the internet and list some possible dangers

List two ways you can prevent viruses on your devices



Possible experiences

How does the internet work?

https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/z3tbgk7

What is the World Wide Web?

https://www.bbc.co.uk/bitesize/topics/zkcqn39/articles/z2nbgk7

Theatre group visit to school (with Y6)

CEOP Becky video
https://vimeo.com/71807752

Online safety – Act your age

https://www.tes.com/teaching-resource/act-your-age-online-safety-animated-story-ks2-e-safety-social-media-facebook-11218299

Online scenarios: role play