

Seamer and Irton CP School – Computing (H.Griffiths)

Topic – The Internet

**Year 4
Autumn 1**

Strand – Computing Systems and Networks

Prior Learning

In Year 3 – Autumn 1 - Connecting Computers learners developed their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They also compared digital and non-digital devices. Learners were then introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches. Finally, learners discovered the benefits of connecting devices in a network.

Key Knowledge I need to understand

I need to understand that:

Information technology (I.T.) includes computers and things that work with computers.

Information and data can be shared by devices across networks.

The internet is a network of networks that is used around the world.

The World Wide Web is a system on the internet that has websites and webpages.

Some content is protected on the internet.

That not all information on the internet is accurate, honest, or legal. Websites and their content are created by people.

Learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They will learn that the World Wide Web is part of the internet, and will be given opportunities to explore the World Wide Web for themselves in order to learn about who owns content and what they can access, add, and create. Finally, they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.

How I will show what I have learned

To describe how networks physically connect to other networks	<ul style="list-style-type: none"> - I can describe the internet as a network of networks - I can demonstrate how information is shared across the internet - I can discuss why a network needs protecting
To recognise how networked devices make up the internet	<ul style="list-style-type: none"> - I can describe networked devices and how they connect - I can explain that the internet is used to provide many services - I can recognise that the World Wide Web contains websites and web pages
To outline how websites can be shared via the World Wide Web (WWW)	<ul style="list-style-type: none"> - I can explain the types of media that can be shared on the World Wide Web (WWW) - I can describe where websites are stored when uploaded to the WWW - I can describe how to access websites on the WWW
To describe how content can be added and accessed on the World Wide Web	<ul style="list-style-type: none"> - I can explain that media can be found on websites - I can recognise that I can add content to the WWW - I can explain that internet services can be used to create content online
To recognise how the content of the WWW is created by people	<ul style="list-style-type: none"> - I can explain that websites and their content are created by people - I can suggest who owns the content on websites - I can explain that there are rules to protect content
To evaluate the consequences of unreliable content	<ul style="list-style-type: none"> - I can explain that not everything on the World Wide Web is true. - I can explain why some information I find online may not be honest, accurate, or legal. - I can explain why I need to think carefully before I share or reshare content

What vocabulary I need to know

Internet, network, router, network security, network switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, internet, content, links, files, use, content, download, sharing, ownership, permission, information, sharing, accurate, honest, content, adverts

The following Glossary may be useful

<https://icompute-uk.com/ewExternalFiles/iCompute-Glossary.pdf>

What's next

In Year 5 – Autumn 1 – Systems and Searching learners develop their understanding of computer systems and how information is transferred between systems and devices. Learners consider small-scale systems as well as large-scale systems. They explain the input, output, and process aspects of a variety of different real-world systems. Learners discover how information is found on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines.

Assessment

National Curriculum Computing links

- 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
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Assessment

Formative assessment opportunities are highlighted in each of the lesson plan documents. The learning objective and success criteria will be introduced at the beginning of each lesson and then reviewed at the end. Learners should assess how well they feel they have met the learning objective using the teacher's chosen method.

Summative assessment document included - multiple choice questions. This should be used, alongside teacher judgement, to complete summative assessment on ScholarPack

<https://teachcomputing.org/curriculum/key-stage-2/computing-systems-and-networks-the-internet>

Online Safety

Education for a Connected World links

Managing online information

- I can analyse information to make a judgement about probable accuracy, and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.
- I can explain what is meant by fake news, e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.
- I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, or influencers).
- I can describe how fake news may affect someone's emotions and behaviour, and explain why this may be harmful.
- I can demonstrate the use of search tools to find and access online content which can be reused by others.

Teacher Subject Knowledge

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.

The YouTube video titled '[A Packet's Tale](https://www.youtube.com/watch?v=ewrBaIT_eBM)' (www.youtube.com/watch?v=ewrBaIT_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