**Year 4 Computing Curriculum – Autumn 1**

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| **Theme: The Internet** | | | | | | | | |
| **Curriculum objectives** | | | **Vocabulary** | | | | | **Links across the curriculum** |
| - Understand computer networks, including the Internet; How they can provide multiple services, such as the worldwide web, and the opportunities they offer for communication and collaboration  - Use search technologies effectively, appreciate how results are selected unranked, and be discerning in valuating 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 accomplished given goals, including collecting, analysing, evaluating and presenting data and information well  - Use technology safely, respectfully and responsibly: recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact | | | **Keyword** | Definition | network | Cluster of computers that communicate | | [**Education for a Connected World links**](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/683895/Education_for_a_connected_world_PDF.PDF)  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.   [**Relationships Education, Relationships and Sex Education (RSE) and Health Education**](https://assets.publishing.service.gov.uk/media/62cea352e90e071e789ea9bf/Relationships_Education_RSE_and_Health_Education.pdf)  Online relationships   * Pupils should know how information and data is shared and used online   Internet safety and Harms   * Pupils should know how to be a discerning consumer of information online * Pupils should know that for most people the internet is an integral part of life and has many benefits | |
| Router | A piece of hardware that allows the transfer of data between computers | Web browser | Where you type the name of the website | |
| Download | To transfer software or data within or across a device | server | Makes devices available on a network | |
| World Wide Web | Collection of websites | access point | Hardware that acts as a communication hub | |
| Web address | The name given to a specific website | cables | Wires connecting devices | |
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| **Prior Knowledge:**  Year 1 – Technology Around Us; Year 2 – IT Around Us; Year 3 – Connecting Computers | | | | | **Future Knowledge:**  Year 5 – Sharing Information; Year 6 - Communication | | | |
| **Lesson Sequence** | | **Key Knowledge** | | | | | **Key Skills** | |
| 1 Connecting networks | | Learners will explore how a network can share messages with another network to form the internet. They will consider some of the network devices involved in this, such as routers, and will also discuss what should be kept in and out of a network to keep safe. | | | | | To describe how networks physically connect to other networks   * 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 | |
| 2 What is the internet made of? | | Learners will describe the parts of a network and how they connect to each other to form the internet. They will use this understanding to help explain how the internet lets us view the World Wide Web and recognise that the World Wide Web is part of the internet which contains websites and web pages. | | | | | To recognise how networked devices make up the internet   * 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 | |
| 3 Sharing information | | Learners will explore what can be shared on the World Wide Web and where websites are stored. They will also explore how the World Wide Web can be accessed on a variety of devices. | | | | | To outline how websites can be shared via the World Wide Web (WWW)   * I can explain the types of media that can be shared on the WWW * I can describe where websites are stored when uploaded to the WWW * I can describe how to access websites on the WWW | |
| 4 What is a website? | | Learners will analyse a website and identify the key parts. They will then consider what content can be added to websites and what factors they should consider before adding content to a website. Finally, they will use a website which enables them to create their own content online. | | | | | To describe how content can be added and accessed on the World Wide Web (WWW)   * I can explain what 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 | |
| 5 Who owns the web? | | Learners will explore who owns the content on the World Wide Web (or ‘web’ for short). They will explore a variety of websites and will investigate what they can and cannot do with the content on them. They will also relate this to principles of ownership and sharing in the real world. | | | | | To recognise how the content of the WWW is created by people   * 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 | |
| 6 Can I believe what I read? | | Learners will gain an appreciation of the fact that not everything they see on the internet is true, honest, or accurate. They will review images and decide whether or not they are real, before looking at why web searches can return ambiguous (and sometimes misleading) results. Finally, learners will complete a practical activity, demonstrating how quickly information can spread beyond their control. | | | | | To evaluate the consequences of unreliable content   * 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 | |
| **Themes and links** | | | | | | | | |
| **Computing themes** | **Where these are covered:** | | | | | | | |
| **Technology around us**  Autumn 1 | * Scratch links to the real world and computer games the children know. | | | | | | | |
| **Digital painting**  Autumn 2 | * Understanding the need for coding and algorithms | | | | | | | |
| **Programming A**  Spring 1 | * Programming the Scratch | | | | | | | |
| **Data /information**  Spring 2 | * Storing the commands and the effect on language on the outcome of your commands. | | | | | | | |
| **Creating media**  Summer 1 | * Your own designs of Scratch | | | | | | | |
| **Programming B**  Summer 2 | * Using Scratch to implement an algorithm as a code | | | | | | | |