Newquay Primary Academy –Computing Autumn 1 Term Sequence

	Year 3	YEAR 4	YEAR 5	YEAR 6
	Prior knowledge… Computing Systems and Network - Learners look at information technology at school and beyond, in settings such as shops, hospitals, and libraries. Learners investigate how information technology improves our world, and they learn about using information technology responsibly.	**Prior knowledge…** Computing Systems and Network - Learners develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They also compare digital and non-digital devices. Following this, learners are introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches. The unit concludes with learners discovering the benefits of connecting devices in a network.	**Prior knowledge…** Computing Systems and Network – Learners apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They learn that the World Wide Web is part of the internet and are given opportunities to explore the World Wide Web for themselves to learn about who owns content and what they can access, add, and create. Finally, they evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.	**Prior knowledge…** Computing Systems and Network – 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 take part in a collaborative online project with other class members and develop their skills in working together online.
INTENT	Pupils will develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs. They also compare digital and non-digital devices. Following this, learners are introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches.	Pupils will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. They learn that the World Wide Web is part of the internet and are given opportunities to explore the World Wide Web for themselves to learn about who owns content and what they can access, add, and create.	Pupils will 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.	Pupils will learn about the World Wide Web as a communication tool. They learn how we find information 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. They investigate different methods of communication, before

				focusing on internet based communication.
VOCABULARY / STICKY KNOWLEDGE	Network, digital device, non-digital device, switch, wireless access point, Wi-Fi	W orld wide web, internet, content, honest, accurate, reliable, false information	Computer system, information transfer, small-scale systems, large-scale systems, input, output, real-world systems, online collaboration	Search engine, result ranking, internet based communication
SEQUENCE OF LESSONS	1. Online Safety Focus: To describe how connected devices can collect and share anyone's information with others. 2.To explain how digital devices function 3.To identify input and output devices 4.To recognise how digital devices can change the way that we work 5.To explain how a computer network can be used to share information 6.To explore how digital devices can be connected 7.To recognise the physical components of a network	1.To describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure. 2.To describe how networks physically connect to other networks 3.To recognise how networked devices make up the internet 4.To outline how websites can be shared via the World Wide Web (WWW) 5.To describe how content can be added and accessed on the World Wide Web (WWW 6.To recognise how the content of the WWW is created by people 7.To evaluate the consequences of unreliable content	1.To explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'. 2.To explain that computers can be connected together to form systems 3. To recognise the role of computer systems in our lives 4.To recognise how information is transferred over the internet 5.To explain how sharing information online lets people in different places work together 6.To contribute to a shared project online 7.To evaluate different ways of working together online	1. To demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important 2. To identify how to use a search engine 3. To describe how search engines select results 4. To explain how search results are ranked 5. To recognise why the order of results is important, and to whom 6. To recognise how we communicate using technology 7. To evaluate different methods of online communication
OUTCOME / COMPOSITE	Pupils will discover the benefits of connecting devices in a network.	Pupils will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.	Pupils will take part in a collaborative online project with other class members and develop their skills in working together online.	Pupils will evaluate which methods of internet communication to use for particular purposes.