Computing: Year Group: 1

Prior Learning EYFS	Year 1 Learning	Year 2 Future Learning	Vocabulary - Subject Specific	Linked Vocabulary
Children will learn to turn on and complete a simple program on the iPad. Children will understand that we can use the computer to find out information. Children will understand that technology is used in different ways such as phones, iPads, CD players, washing machine etc. Children will learn to turn on and complete a simple program on the laptop.	**Computer Science:** Pupils understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program. Pupils can work out what is wrong with a simple algorithm when the steps are out of order, and can write their own simple algorithm. Pupils know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code. When looking at a program, pupils can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. **Information Technology** Pupils will begin by using labels to put objects into groups, and labelling these groups. Pupils will demonstrate that they can count a small number of objects, before and after the objects are grouped. They will then begin to demonstrate their ability to sort objects into different groups, based on the properties they choose. Finally, pupils will use their ability to sort objects into different groups to answer questions about data. Pupils will familiarise themselves with typing on a keyboard and begin using tools to change the look of their writing, and then they will consider the differences between using a computer	**Computer Science:** Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code. Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors. Children's program designs display a growing awareness of the need for logical, programmable steps. Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program. **Information Technology** Pupils will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real. Pupils are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work using the Purple Mash application '2Count'.	alert, avatar, button, device, file name, icon, log in, log out, menu, my work area, notification, password, private, computer, technology, action, algorithm, background, code, coding, command, debug/debugging, event, execute, instruction, object, output, plan, programmer, properties, run, collect data, compare, data, pictogram, record results, title, criteria, groups, sort	alert, button, file name, menu, area, password, private, technology, action, background, code, command, event, execute, instruction, object, plan, properties, run, collect data, compare, data, pictogram, record results, title, criteria, groups, sort

	and writing on paper to create text. **Digital Literacy:** Pupils will become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly.	**Digital Literacy:** Pupils explore how IT benefits society in places such as shops, libraries, and hospitals. Whilst discussing the responsible use of technology, and how to make smart choices when using it.		

Common Misconceptions	Key Questions:	Famous People Links
• Misunderstanding of key vocabulary. • Finding and saving work. • What the internet is (WWW) – being online. • Awareness of self and others whilst using technology.	• What is a password and why should we keep them safe? • What is a digital avatar? • Where is my work stored on Purple Mash? • What is technology? • How does technology make our lives easier? • What is coding? • Why is it useful to design before coding? • How can you make characters move in a 2Code program? • What is a pictogram? • Why do we use pictogram? • How can we create a pictogram? • In what ways can we sort objects?	• Charles Babbage – First person to make a mechanical computer. • Alan Turing – Mathematician who famously helped break Germany's Enigma code by design a computer to decipher the code. • John Von Neumann – Mathematician who developed computer architecture. E.g. memory (RAM). • Douglas Engelbart – pioneer in the development of modern computers. • Steve Jobs – Co-founder of Apple which invented iPad, iPhone, Apple Mac. • Philip Don Estridge – Developed the first IBM personal computer which paved the way for universal parts/ peripherals. • Bill Gates – Founder of Microsoft. • Tim Berners-Lee – invented the WWW. • https://www.sutori.com/en/story/famous-people-in-computer-history--TcHp7hWrDd1ZfLW2zQfxCs5h

Assessment Opportunities/Final Assessment
• FFT – Termly Assessments • Continuous assessment (AfL / formative).