				Computing Progression of Skills			
	Information Technology: Multimedia (including online tools				Computer Science (CS): Computers & networks	Digital Literacy (Online Safety)	**Programming**
	Text & design	Image, film & sound	Internet	Data sorting			
Y1	•Select or create appropriate images / sound to add to work • Write and send a short comment perhaps in Seesaw	•Use a painting app to create a picture • Take photographs • record an audio track • Work with a simple animation app such as Puppet Pals or Shadow Puppets to tell a story • Listen to pre-recorded sound • Record and playback sounds (eg voices, instruments, sounds around them …)	•Use appropriate buttons, menus and hyperlinks to navigate web sites for stored information. • Enter text into a search engine to find specific given web sites • Understand that different forms of information (text, images, video) exist and that some are more useful than others for specific purposes.	• Develop simple classification skills by carrying out simple sorting activities (probably away from the computer) • Sort and classify a group of items by asking simple yes / no questions	• Be aware of obvious uses of technology in and beyond school (i.e. things that clearly look like computer devices) • Understand some of the things that people do with computers at work and at home • Be able to save (and successfully retrieve) their own work on a tablet.	I can tell you what personal information is. I can tell an adult when I see something unexpected or worrying online. I can talk about why it's important to be kind and polite . I can recognise an age appropriate website. I can agree and follow sensible e-safety rules	I can give instructions to my friend and follow their instructions to move around. I can describe what happens when I press buttons on a robot. I can press the buttons in the correct order to make my robot do what I want. I can describe what actions I will need to do to make something happen. I can begin to predict what will happen for a short sequence of instructions. I can begin to use software/apps to create movement and patterns on a screen. I can use the word 'debug' when I correct mistakes when I Program.

Y2	• Understand the different ways that messages can be sent, email, text letter, phone … and begin to consider advantages of each 2 • Edit work in the light of their own discussions and observations. 2 • Develop familiarity and correct use of a keyboard (onscreen or real) – spacebar (single press not "finger space"), backspace, shift / caps lock), return etc. 2	• Begin to discuss the quality of their image and make decisions (e.g delete a blurred image) 2 • Explore a range of electronic music and sound devices including keyboards, tablets perhaps in Garage Band 2 • Begin to understand that music and sound can affect mood and atmosphere 2	• Locate specific sites by typing a website address (URL) into the address bar in a web browser (Safari). 2 • Begin to develop key questions to help find information 2 • Be aware of responsible internet use and the school's acceptable use policy (see digital literacy strand) 2	• Talk about the different ways technology can be used to collect information, (e.g. camera, microphone, accelerometer) 2 • Understand that technology can be used to sort items and information 2	• Have a growing awareness of things in and beyond the home that have some kind of computer in them (microwave, washing machine…) • Understand that most computers, tablets and phones are connected to the internet. • Recognises that any one of a range of digital devices can be considered a computer. • Understand that sometimes data is stored in "the cloud" to make it accessible on other devices and by other people.	I can explain why I need to keep my password and personal information private. I can describe the things that happen online that I must tell an adult about. I can talk about why I should go online for a short amount of time. I can talk about why it is important to be kind and polite online and in real life. I know that not everyone is who they say they are on the internet.	I can tell you the order I need to do things to make something happen and talk about this as an algorithm. I can program a robot or software to do a particular task. I can look at my friend's program and tell you what will happen. I can use programming software to make objects move. I can watch a program execute and spot where it goes wrong so that I can debug it.
	Reasoning				**Networks and search engines**	**Safe use**	**Programming**

3	discern when it is best to use technology and where it adds little or no value				navigate the web to complete simple searches use a range of software for similar purposes collect and present information understand what computer networks do and how they provide multiple services	use technology respectfully and responsibly Know different ways they can get help if concerned	write programs that accomplish specific goals design a sequence of instructions, including directional instructions
4	make an accurate prediction and explain why they believe something will happen (linked to programming)				know how to search for specific information and know which information is useful and which is not select and use software to accomplish given goals combine sequences of instructions and procedures to turn devices on and off	recognise acceptable and unacceptable behaviour using technology	give an 'on-screen' robot specific instructions that takes them from A to B experiment with variables to control models
5	analyse and evaluate information reaching a conclusion that helps with future developments				understand how search results are selected and ranked produce and upload a podcast	understand that they have to make choices when using technology and that not everything is true and/or safe	use technology to control an external device develop a program that has specific variables identified
6	design algorithms that use repetition and 2-way selection				be aware that some search engines may provide misleading information present the data collected in a way that makes it easy for others to understand	Be increasingly aware of the potential dangers in using aspects of IT and know when to alert	write a program that combines more than one attribute develop a sequenced

						someone if feeling uncomfortable	program that has repetition and variables identified

KS1 - **Uses of IT beyond school**

Progression Statements CS: Computers & networks	Lesson ideas and resources
Information technology beyond school	
• Be aware of obvious uses of technology in and beyond school (i.e. things that clearly look like computer devices)	• Walk around the school and photograph all the uses of technology that the children can find and use the photographs for a display. As a possible extension, photographs could be joined in a web to show how they connect to each other.
• Understand some of the things that people do with computers at work and at home.	• Design a poster showing uses of technology in and beyond school. Talk to parents about how they use technology at work.
• Have a growing awareness of things in and beyond the home that have some kind of computer in them (microwave, washing machine…) 2	• On a trip to a local supermarket spend some time looking at how technology is used obviously and behind the scenes in the store. How a supermarket works is a good activity from Phil Bagge
• Understand that most computers, tablets and phones are connected to the internet. 2	• Children should experience repeated use of internet services in the course of their computing work. Take time out to discuss them and what other devices might usefully access them, talk about the advantages and disadvantages of each.
• Recognises that any one of a range of digital devices can be considered a computer. 2	• Ask children to bring in example of different types of digital technology (the real thing, or photographs) • Keep a diary of the number of digital devices they or their parents use in a day
File management	
• Be able to save (and successfully retrieve) their own work on a tablet.	• Save / open files in the course of learning. Discuss different ways of saving for different devices / purposes.
• Understand that sometimes data is stored in "the cloud" to make it accessible on other devices and by other people. 2	• Use Seesaw to build their own portfolio of work, to share it with others and to comment on others' work. Show the children wireless access points in the classroom and cables connecting them and wired computers. Trace their path back to the server…
• See related statements and lesson ideas in digital literacy around the importance of passwords, sharing files on the internet etc.	