

COMPUTING Curriculum Progression at Merebrook Infant School

Key stage 1 National Curriculum:			
<u>Computer Science:</u> <ul style="list-style-type: none"> understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs use logical reasoning to predict the behaviour of simple programs 			
<u>Information Technology:</u> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 			
<u>Digital Literacy</u> <ul style="list-style-type: none"> recognise common uses of information technology beyond school use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. 			
Pillar of Learning: Computer Science			
	Early Years	Year 1	Year 2
Declarative Knowledge	<ul style="list-style-type: none"> To know that I can respond to simple cause and effect devices e.g. push a button to hear a sound. 	<ul style="list-style-type: none"> To know that an algorithm is a set of instructions. To know that an algorithm written for a computer is called a program. 	<ul style="list-style-type: none"> To know that an algorithm is a set of instructions to complete a task.
Procedural Knowledge	<ul style="list-style-type: none"> To know how to predict events in stories and real-life situations. To know how to use a range of electronic toys in play situations (Beebots, remote control toys, toy tills, scanners, microwave). 	<ul style="list-style-type: none"> To know how to work out what is wrong when the steps are out of order in instructions. To explain that if something does not work how it should, it is because the code is incorrect. To know how to try and fix a code if it is not working properly. To know how to make good guesses of what is going to happen in a program. For example, where the turtle might go. 	<ul style="list-style-type: none"> To know how to carefully plan an algorithm so it will work when made into code. To know how to design a simple program using 2Code that achieves a purpose. To find and correct some errors in my program. To know how to explain what will happen in a program. To know how to spot something in a program that has an action or effect (does something).
Vocabulary	Forwards, Backwards, on, off, button, switch, move, sound, light, predict, 'I think...'	Instruction, algorithm, program, debug / debugging, direction, arrow, undo, rewind, right/left turn, code, action.	Background, predict, sequence, test.
Pillar of Learning: Information Technology			
Declarative Knowledge	<ul style="list-style-type: none"> To know I can sort and classify by carrying out sorting activities away from the computer. To know that I can create simple pictograms as part of a group/class (whole group adult to lead). 	<ul style="list-style-type: none"> To know I can name my work. To know I can save my work. To know that I can find my work. To know that I can change content on a file such as text, sound and images. 	<ul style="list-style-type: none"> To know that data can be organised - using a database such as 2Investigate. To know that I can find data. To know that I can edit digital data. To know that I can include photos, text and sound in my creations.
Procedural Knowledge	<ul style="list-style-type: none"> To know how to use the mouse/mouse pad/touch screen accurately. To know how to use a paint program to make marks using simple tools. To know how to can use the keyboard to produce text on screen i.e. type own name. 	<ul style="list-style-type: none"> To know how to name my work. To know how to save my work. To know how to find my work. To know how to change content on a file such as text, sound and images. To know how to sort sound, pictures and text. To know how to add sound, pictures and text to a program such as 2Create a Story. 	<ul style="list-style-type: none"> To know how to name, save and find my work. To know how to organise data – for example, using a database such as 2Investigate. To know how to find data using specific searches – for example, using 2Investigate. To know how to use several programs to organise information – for example, using binary trees such as 2Question or spreadsheets such as 2Calculate. To know how to edit digital data such as data in music composition software like 2Sequence. To know how to include photos, text and sound in my creations.
Vocabulary	Keyboard, key, mouse pad, mouse, pen/paint brush/spray, tools, keyboard, camera, letters, space bar, numbers, back space, sort, group, same, different.	Save, My Work, tools, sort, criteria, pictogram, data, collate, file, sound effect, font, arrow keys, backspace, cursor, delete key, clipart, cells, columns, rows.	Search, copy and paste, spreadsheet, question, data, collate, database, template, digitally, volume, soundtrack, image.
Pillar of Learning: Digital Literacy			
Declarative Knowledge	<ul style="list-style-type: none"> To know safe adults to talk to. 	<ul style="list-style-type: none"> To know what technology is. To know examples of technology are in school. To know examples of technology are at home. 	<ul style="list-style-type: none"> To know where technology is used at school such as in the office or canteen. To know that I can find information using a search engine. To know the consequences of not searching online safely.

		<ul style="list-style-type: none"> To know that a chair uses old technology and a smart phone uses new technology. To know that I can save my work in a safe place. 	<ul style="list-style-type: none"> To know that I can report unkind behaviour. To know that my creations such as programs in 2Code, need similar skills to the adult world. e.g. The program used for collecting money for school trips.
Procedural Knowledge	<ul style="list-style-type: none"> To know how identify safe stranger adults i.e. police, ambulance, doctor, fire brigade. To know how to talk about right and wrong choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets me. 	<ul style="list-style-type: none"> To know how to can keep my login information safe. To know how I can save my work in a safe place such as ‘My Work’ folder. 	<ul style="list-style-type: none"> To know how to find information I need using a search engine. To know how to share work and communicate electronically – for example using 2Email or the display boards. To know how I can report unkind behaviour and things that upset me online, to a trusted adult.
Vocabulary	Right, wrong, choice, unkind, feeling, upset, stranger.	Login, log out, Username, password, My Work, Avatar, technology	Search, Internet, search engine, attachment, Email, sharing, digital footprint