

Cycle A – 2023-2024		
	EYFS	Yr1/2
Autumn 1	Using a computer	Bee-Bots
	To be able to understand what a computer keyboard is and recognise some letters and numbers. To know that a mouse can be used to click, drag and create simple drawings. To know that to use a computer you need to log in to it and then log out at the end of your session.	To understand the basic functions of a Bee-Bot. To know that you can use a camera/tablet to make simple videos. To know that algorithms move a Bee-Bot accurately to a chosen destination.
Autumn 2		Digital imagery To understand that holding the camera still and considering angles and light are important to take good pictures. To know that you can edit, crop and filter photographs. To know how to search safely for images online.
Spring 1	All about instructions To know that being able to follow and give simple instructions is important in computing. To understand that it is important for instructions to be in the right order. To understand why a set of instructions may have gone wrong.	Introduction to data To know how that charts and pictograms can be created using a computer. To understand that a branching database is a way of classifying a group of objects. To know that computers understand different types of 'input'.



	Exploring hardware	Scratch Jr
Spring 2	To know that different types of technology can be found at home and in school.	To know that coding is writing in a special language so that the computer understands what to do.
	To know that you can take simple photographs with a camera or iPad. To know that you must hold the camera still and ensure the subject is in the shot to take a photo.	To understand that the character in Scratch Jr is controlled by the programming blocks. To know that you can write a program to create a musical instrument or tell a joke.
Summer 1	Programming Bee-Bots To know that you can program a Bee-Bot with some simple commands.	Stop motion To understand that an animation is made up of a sequence of photographs.
	To understand that debugging means how to fix some simple programming errors. To understand that an algorithm is a set of clear and precise instructions.	To know that small changes in my frames will create a smoother looking animation. To understand what software creates simple animations and some of its features e.g. onion skinning.



	Introduction to data	International space station
Summer 2	To know that sorting objects into various categories can help you locate information. To know that using yes/no questions to find an answer is known as a branching database. To know that a pictogram is a way of showing information.	To understand that you can enter simple data into a spreadsheet. To understand what steps you need to take to create an algorithm. To know what data to use to answer certain questions. To know that computers can be used to monitor supplies.
		Online safety To understand the difference between online and offline. To understand what information I should not post online. To know what the techniques are for creating a strong password. To know that you should ask permission from others before sharing about them online and that they have the right to say 'no.' To understand that not everything I see or read online is true.



Cycle B — 2022-2023		
	EYFS	Yr1/2
Autumn 1	Using a computer	Improving mouse skills
Autumn 2	To be able to understand what a computer keyboard is and recognise some letters and numbers. To know that a mouse can be used to click, drag and create simple drawings. To know that to use a computer you need to log in to it and then log out at the end of your session.	To know that "log in and log out" means to begin and end a connection with a computer. To know that a computer and mouse can be used to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art. To know that passwords are important for security. Algorithms unplugged To understand that an algorithm is when instructions are put in an exact order. To know that input devices get information into a computer and that output devices get information out of a computer.
		To understand that decomposition means breaking a problem into manageable chunks and that it is important in computing.
		To know that we call errors in an algorithm 'bugs' and fixing these 'debugging'.
Spring 1	All about instructions To know that being able to follow and give simple instructions is important in computing.	Rocket to the moon To know that when we create something on a computer it can be more easily saved and shared than a paper version.
	To understand that it is important for instructions to be in the right order.	To know some of the simple graphic design features of a piece of online software.
	To understand why a set of instructions may have gone wrong.	To know that a spreadsheet is an electronic 'table' for sorting data.



	Exploring hardware	What is a computer?
Spring 2	To know that different types of technology can be found at home and in school. To know that you can take simple photographs with a camera or iPad. To know that you must hold the camera still and ensure the subject is in the shot to take a photo.	To know the difference between a desktop and laptop computer. To know that people control technology. To know some input devices that give a computer an instruction about what to do (output). To know that computers often work together.
	Programming Bee-Bots	Algorithms and debugging
Summer 1	To know that you can program a Bee-Bot with some simple commands. To understand that debugging means how to fix some simple programming errors. To understand that an algorithm is a set of clear and precise instructions.	To understand what machine learning is and how it enables computers to make predictions. To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. To know that abstraction is the removing of unnecessary detail to help solve a problem.



	Introduction to data	Word processing
Summer 2	To know that sorting objects into various categories can help you locate information. To know that using yes/no questions to find an answer is known as a branching database. To know that a pictogram is a way of showing information.	To know that I can make text a different style, size and colour. To know that "copy and paste" is a quick way of duplicating text.
		Online safety
		To know that the internet is many devices connected to one another.
		To know what to do if you feel unsafe or worried online - tell a trusted adult.
		To know that people you do not know on the internet (online) are strangers and are not always who they say they are.
		To know that to stay safe online it is important to keep personal information safe.
		To know that 'sharing' online means giving something specific to someone else via the internet and 'posting' online means placing information on the internet.