

Computing Skills Progression

	Computer Science	Information Technology	Digital Literacy
EYFS	- Follow simple oral algorithms - Spot simple patterns - Sequence simple familiar tasks - Name items we control in the everyday environment - Use everyday technology devices - Explore on screen activities – by clicking cause and effect - Use on screen simulations and compare with real life - activities – click and drag activities - Create a simple algorithm for a floor robot e.g.: Bee Bots	- Move the mouse with some control to point and click - Use the mouse to click and drag - Right click using the mouse and uses the mouse pad on a laptop - Use a paint package to draw a picture using a range of devices e.g. Paint, 2Paint a picture - Save work in a folder - Use simple tools in a painting package e.g. different sized brushes, colour-fill, and palette - Find the letters in name on a computer keyboard and type name	- Identify some simple examples of personal information (name, address, birthday and age for example) - Identify rules that help keep people safe and healthy in and beyond the home when using technology. - Say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks them to do something that makes them feel sad, embarrassed or upset. - Describe ways that some people can be unkind online. - Recognise some ways in which the internet can be used to communicate. Give examples of how they (might) use technology to communicate with people they know. Identify ways that they can put information on the internet. - Talk about how I can use the internet to find things out - Identify devices I could use to access information on the internet
Key Vocabulary	Computer, iPad, tablet, App, button, mouse, screen, keyboard, Google, information, control, instruction, internet, robot, save, sequence, instructions, search, safety, online, password, click, internet, offline, online, username, BeeBot		

	Computer Science	Information Technology	Digital Literacy
Year 1	• 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.	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	• 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.
Key Vocabulary	Online Safety and Exploring Purple Mash: Log in, Username, password, Avatar, Log out, Save, Notification Technology Outside of School: Technology Animated Story Books: Animation, E-Book, Font, File, Sound Effect, Display Board Coding: Action, Button, Character, Coding, Command, Debug/ Debugging, Input, Object		

	Computer Science	Information Technology	Digital Literacy
Year 2	- 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.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	- 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.
Key Vocabulary	Online Safety: Search, Internet, Sharing, Digital footprint, Email Effective Searching: Internet, Search, Search engine Coding: Action, Algorithm, Bug, Character, Code block, Debug/Debugging, Input, Object Presenting Ideas: Concept map, Presentation, Audience, Node		

	Computer Science	Information Technology	Digital Literacy
Year 3	- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.
Key Vocabulary	Touch typing- Posture, Top/ Home/Bottom row keys, Space bar Coding- Action, Algorithm, Bug, Code Block, Code design, Command, Control, Debug/Debugging, Event, If, Input, Output, Object, Properties, Repeat, Selection, Timer, Variable Emails- Communication, Email, Send, Attachment, Address Book, Password Branching Databases- Branching Database, Data, Database Hardware detectives- Motherboard, CPU, RAM, Graphics card, Network Card, Monitor, Speakers, Keyboard, Mouse		

	Computer Science	Information Technology	Digital Literacy
Year 4	- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - Understand computer networks, including the internet; how they can provide multiple services, such as the - World Wide Web, and the opportunities they offer for communication and collaboration.	- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.
Key Vocabulary	Coding- Action, Alert, Algorithm, Bug, Command, Control, Debug/Debugging, Event, Get input, If, If/Else, Input, Output, Object, Repeat, Selection, Timer, Variables Animation- Animation, Frame, Onion skinning, Background, Play, stop motion 3D Modelling- CAD(Computer aided design, Modelling, 3D, Viewpoint, 2D, Net, Points, Template Effective Searching- Easter Egg, Internet, Internet Browser, Search, Search Engine, Spoof website, Website		

	Computer Science	Information Technology	Digital Literacy
Year 5	- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - Understand computer networks, including the internet; how they can provide multiple services, such as the - World Wide Web, and the opportunities they offer for communication and collaboration.	- Use technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.
Key Vocabulary	Coding- Action, Alert, Algorithm, Bug, Code Design, Command, Control, Debug/ Debugging, Design Mode, Event, Get input, If, If/Else, Input, Output, Object, Repeat, Sequence, Selection, Timer, Variable Databases- Avatar, Branching Database, Charts, Collaborative, Data, Database, Find, Record, Sort, Group, Arrange, Reports, Table Game Creator- Animation, Computer Game, Customise, Evaluation, Image, Instructions, Interactive, Screenshot, Texture, Perspective, Playability		

	Computer Science	Information Technology	Digital Literacy
Year 6	- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. - Use sequence, selection and repetition in programs; work with variables and various forms of input and output. - Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. - Understand computer networks, including the internet; how they can provide multiple services, such as the - World Wide Web, and the opportunities they offer for communication and collaboration.	- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. - Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.
Key Vocabulary	Coding- Action, Alert, Algorithm, Bug, Code Design, Command, Control, Debug/Debugging, Event, Function, Get Input, If, If/Else, Input, Output, Object, Repeat, Sequence, Selection, Timer, Variable Blogging- Audience, Blog, Blog Page, Blog Post, Collaborative, Icon Quizzing- Audience, Collaboration, Concept Map, Database, Quiz Networks- Internet, World Wide Web, Network, Local Area Network (LAN), Wide area Network (WAN), Router, Network Cable, Wireless		