

Computing Curriculum Progression

Year	Term	Topic	Key Learning Outcomes	Activities
1	Autumn 1	The Enchanted Woodland	<ul style="list-style-type: none"> Use technology purposefully to retrieve digital content. 	<ul style="list-style-type: none"> Learn about the Woodland Trust
	Autumn 2	Weather and Seasons	<ul style="list-style-type: none"> Use technology purposefully. Recognise common uses of technology beyond school. 	<ul style="list-style-type: none"> Film themselves presenting the weather. Explore BBC weather website
	Spring 1	Dinosaur Planet	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Safer Internet Day – Use technology safely and respectfully, keeping personal information private; identify where to go to for help and support when they have concerns about content or contact on the internet or other online technologies. 	<ul style="list-style-type: none"> Make a short stop motion animation using model dinosaurs.
	Spring 2	Paws, Claws and Whiskers	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<ul style="list-style-type: none"> Find images of their favourite zoo animals – cut and paste Take photos of their mystery pet
	Summer 1	Bright Lights, Big City	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Understand what algorithms are; how they are implemented as programs of 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. Recognise common use of information technology beyond school. 	<ul style="list-style-type: none"> Direct a share bear around a map. Copy past and save images of the Queen. Virtual tour of the British Monarchy website. Create an algorithm from Buckingham Palace to the London Eye via Big Ben. Copy, paste and save images of London landmarks. Debug instructions and creating algorithms. To program and debug instructions – London Eye to St Pauls Cathedral via the monument near Pudding Lane.
	Summer 2	Moon Zoom	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 	<ul style="list-style-type: none"> NASA website Create an alien terrain for the Beebots. Children edit and test their instructions for accuracy. Create an alien picture – I pads doodle pad

			<ul style="list-style-type: none"> • Understand what algorithms are; how they are implemented as programs of 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. 	
2	Autumn 1	Wriggle and Crawl	<ul style="list-style-type: none"> • Understand use of algorithms • Write & test simple programs • Use logical reasoning to make predictions • Organise, store, retrieve & manipulate data • Communicate online safely and respectfully • Recognise uses of IT outside of school 	<ul style="list-style-type: none"> • Life cycle algorithms – rewrite the hungry caterpillar • Webcam footage of colony of bees • Bee programming – beebots – get the bee from the flower to the hive etc
		Land Ahoy	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
3	Autumn 1	Internet Safety	<ul style="list-style-type: none"> • Keep It Private 	<ul style="list-style-type: none"> • To consider the choices you can make to keep safe online • To know to ask an adult for help • To understand the potential dangers of going online and how to avoid them
	Autumn 2	Internet Safety	<ul style="list-style-type: none"> • Believe It or Not! 	<ul style="list-style-type: none"> • To consider the choices you can make to keep safe online • To know to ask an adult for help • To understand the potential dangers of going online and how to avoid them
	Spring 1	Internet Safety	<ul style="list-style-type: none"> • Safer Internet Day (Making Decisions) 	<ul style="list-style-type: none"> • To understand how actions can affect other people • To start making decision about their personal online behaviour • To know to ask an adult for help
	Spring 2	Predators	<ul style="list-style-type: none"> • Design write and debug programs that accomplish specific goals, cluding stimulating physical systems • Use sequence, selection, and repetition in programs, work with variables and various forms of input and output. 	<ul style="list-style-type: none"> • To learn that the information they put online leaves a digital footprint or “trail.” • To explore what information is appropriate to be put online. • To judge the nature of different types of digital footprints by following the information trails of two fictional animals

		My Online World	<ul style="list-style-type: none"> Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 	
	Summer 1	Digital Citizens	<ul style="list-style-type: none"> Use technology safely 	<ul style="list-style-type: none"> To compare and contrast their responsibilities to their offline and online communities To reflect on the characteristics that make someone an upstanding citizen To devise resolutions to digital dilemmas
	Summer 2	Online Friends Tribal Tales	<ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content. 	<ul style="list-style-type: none"> Research Stone Age, Iron Age and Bronze Age. To understand how to show respect in social situations To recognise the importance of tone in both face-to-face and online communications To learn rules for writing clear and respectful emails by editing an email message.
4	Spring 2	Misty Mountain Sierra	<ul style="list-style-type: none"> To use digital/computer mapping to locate countries and describe features studied. To use search technologies effectively. To 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. To select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals. 	<ul style="list-style-type: none"> Take a virtual trip around a focus mountain range. Use satellite/webcam images. Complete a modern day treasure hunt finding a geocache. Search existing geocaches or use cache coordinates to discover new ones. Create a 2D animation of the water cycle
	Summer 1	E-Safety	<ul style="list-style-type: none"> To use technology safely, respectfully and responsibly. 	<ul style="list-style-type: none"> Internet safety day. E-safety lessons.

5	Autumn 2	Scream Machine	<ul style="list-style-type: none"> To 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 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 arrange of ways to report concerns about contact 	<ul style="list-style-type: none"> Theme park investigation – maps and plans – looking at rides and amenities. Creating maps and keys Analyse and compare theme parks' websites
	Spring 1	Safer Internet Day	<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify arrange of ways to report concerns about contact 	<ul style="list-style-type: none">
	Spring 2	Alchemy Island	<ul style="list-style-type: none"> To select, use and combine a variety of software on a range of digital devices to design and write a range of programs To design, write and debug programs that accomplish specific goals 	<ul style="list-style-type: none"> Look for potential portals outside. Compare natural portals with man-made. Take photographs with digital camera, upload and add special effects with editing software. Work in pairs using Scratch to trace the route of the next stage of the journey. Potential to deepen this
6	Autumn 1	E- Safety	<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<ul style="list-style-type: none"> See internet safety day.
	Autumn 2	Child's War	<ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 	<ul style="list-style-type: none"> Use the web to find information about the Battle of Britain.
	Spring 1	Frozen Kingdom	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Use the internet to download images of icebergs- ice shelves, sea glaciers, glaciers.

			given goals, including collecting, analysing, evaluating and presenting data and information.	
Summer 1	Blood Heart	<ul style="list-style-type: none"> • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. • Use sequence, selection, and repetition programs; work with variables and various forms of input and output. 	<ul style="list-style-type: none"> • Visit 'Give Blood' website. Share discoveries. 	