



Computing curriculum overview

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
N	<p>Children will have access to high quality technology equipment throughout the school year so that they can tinker and develop their skill progression over time.</p> <p>Coverage from UW:</p> <ul style="list-style-type: none"> Shows interest in real objects such as cameras and mobile phones. Knows how to operate simple equipment, e.g. turns on a CD player. Shows interest in technological toys. Shows skill in making toys work by pressing parts of lifting flaps to achieve sound effects such as sound, movements or new images. Knows that information can be retrieved from computers. <p>Enabling environment:</p> <ul style="list-style-type: none"> Toy phones and cameras. Real and working technology such as CD players, torches, instruments, computer. Programmable toys including remote control cars and beebots. 					
R	<p>Children will have access to high quality technology equipment throughout the school year so that they can tinker and develop their skill progression over time.</p> <p>Coverage from UW:</p> <ul style="list-style-type: none"> Children can complete a simple program on a computer. Children can use ICT hardware to interact with age-appropriate computer software. Current ELG - Children recognise that a range of technology is used at home and at school. <p>Enabling environment:</p> <ul style="list-style-type: none"> Toy phones and cameras. Real and working technology such as CD players, torches, instruments, computer. Children get daily access to play a variety of games from sites such as busy things on the desktop computers. Children get to tinker with the beebots and attempt to navigate them around the mat. Using technology such as microwaves, ovens, washing machines for a purpose. 					
1	Understanding Technology: Recognise common use of IT at home and in school.	Online Safety: Understand where to go for help when he/she has	Programming: Predict the behaviour of simple programs.	Digital Literacy Using technology purposefully to create digital content.	Programming: Predict the behaviour of simple programs.	Digital Literacy Using technology purposefully to create digital content.

		concerns about content or content online.	Understand what algorithms are and how they are implemented on digital devices. UNPLUGGED	<u>Typing</u> - Children are taught to use the keyboard and locate the keys. They aiming to be able to type 5 words per minute by the end of the academic year.	Understand what algorithms are and how they are implemented on digital devices. PLUGGED	Outdoor explorer project – Powerpoint about summer.
2	Understanding Technology: Recognise common uses of information technology beyond school.	Online Safety: Use technology safely and keep personal information private.	Programming: Use logical reasoning to predict the behaviour of simple programs. Create simple programs. Create and debug simple programs. Debug simple programs by using logical reasoning to predict the actions instructed by the code. Understand that programs execute precise and unambiguous instruction	Digital Literacy: Uses technology to purposefully to create, organise, store, manipulate and retrieve digital content. Use technology purposefully to create digital content, comparing the benefits of different programs. <u>Typing</u> - Children are taught to type and achieve the standard of 8 words per minute (these should be from the year 2 spelling list and be displayed for children to copy).	Programming: Use logical reasoning to predict the behaviour of simple programs. Create simple programs. Create and debug simple programs. Debug simple programs by using logical reasoning to predict the actions instructed by the code. Understand that programs execute precise and unambiguous instructions.	Digital Literacy: Uses technology to purposefully to create, organise, store, manipulate and retrieve digital content. Use technology purposefully to create digital content, comparing the benefits of different programs. Outdoor explorers project – Make a photo booklet.
3	<u>Understanding Technology Computers</u> Recognise familiar forms of input and output devices and how they are used. Make efficient use of familiar forms of input and output devices.	Online Safety Use technology safely and respectfully, keeping personal information private. Use technology safely and recognise acceptable and unacceptable behaviour.	Programming Design, write and debug simple programs that control or simulate virtual events. Use logical reasoning to explain how some algorithms work.	Digital Literacy With support select and use a variety of software to accomplish specific goals. <u>Net Searching</u>	Programming Design, write and debug simple programs that control or simulate virtual events.	Digital Literacy With support select and use a variety of software to accomplish specific goals. <u>Net Searching</u>

	<p><u>Networks</u> Understand that computer networks enable the sharing of data and information. Understand that the internet is a large network of computers and that information can be shared between computers.</p>			<p>Use simple search technologies.</p> <p>Use simple search technologies and recognise that some sources are more reliable than others.</p> <p><u>Typing</u> Children are taught to type and achieve the standard of 12 words per minute (these should be from the year 3 spelling list and be displayed for children to copy).</p>	<p>Use logical reasoning to explain how some algorithms work.</p>	<p>Use simple search technologies.</p> <p>Use simple search technologies and recognise that some sources are more reliable than others.</p> <p>Outdoor Explorers Project – Powerpoint about school trip.</p>
4	<p>Understanding Technology</p> <p><u>Computers</u> Uses other input devices such as cameras or sensors.</p> <p><u>Networks</u> Understand what servers are and how they provide services to a network.</p>	<p>Online Safety Use technology responsibly and understand that communication online may be seen by others.</p> <p>Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies.</p>	<p>Programming Decompose programs into smaller parts.</p> <p>Use logical reasoning to detect and correct errors in algorithms.</p> <p>Select, use and combine a variety of software, systems and content that accomplish given goals.</p>	<p>Digital Literacy With support select and use a variety of software on a range of digital devices.</p> <p>With support select and use a variety of software on a range of digital devices to accomplish given goals.</p> <p><u>Net searching</u> Understand how results are ranked by search engines.</p> <p><u>Typing</u></p>	<p>Programming Decompose programs into smaller parts.</p> <p>Use logical reasoning to detect and correct errors in algorithms.</p> <p>Select, use and combine a variety of software, systems and content that accomplish given goals.</p>	<p>Digital Literacy With support select and use a variety of software on a range of digital devices.</p> <p>With support select and use a variety of software on a range of digital devices to accomplish given goals.</p> <p><u>Net searching</u> Understand how results are ranked by search engines.</p> <p><u>Our project- Leaflet about Parkland Walk</u></p>

				Children are taught to type and achieve the standard of 13 words per minute (these should be from the year 4 spelling list and be displayed for children to copy).		
5	<p><u>Understanding Technology</u></p> <p><u>Networks</u> Understand computer networks and begin to use internet services to share and transfer data to a third party (e.g. sharing projects on scratch).</p> <p><u>Net Searching</u> Use filters in search technologies effectively.</p> <p>Appreciate how results are selected and ranked.</p>	<p><u>Online Safety</u> Understand the need to only select age appropriate content.</p>	<p><u>Programming</u> Design, input and test an increasingly complex set of instructions to a program or device.</p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</p> <p>Design, write and test simple programs that follow a sequence of instruction or allow a set of instructions to be repeated.</p> <p>Design, write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work to</p>	<p><u>Digital literacy</u></p> <p><u>Using Computer</u> Independently select and use appropriate software for a task.</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience.</p> <p><u>Typing</u> Children are taught to type and achieve the standard of 15 words per minute (these should be from the year 5 spelling list and be displayed for children to copy).</p>	<p><u>Programming</u> Design, input and test an increasingly complex set of instructions to a program or device.</p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</p> <p>Design, write and test simple programs that follow a sequence of instruction or allow a set of instructions to be repeated.</p> <p>Design, write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user.</p>	<p><u>Digital Literacy</u></p> <p><u>Using Computers</u> Independently select and use appropriate software for a task.</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience.</p> <p><u>Our Project – sound book</u></p>

			ensure a program's efficiency.		Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency.	
6	<p><u>Understanding Technology</u> <u>Net Searching</u> Be discerning when evaluating digital content.</p> <p>Use filters in search technologies effectively and is discerning when evaluating digital content.</p>	<p><u>Online Safety</u> Identify a range of ways to report concerns about content and contact in and out of school.</p>	<p><u>Programming</u> Include use of sequences, selection and repetition with the hardware used to explore real world systems.</p> <p>Solves problems by decomposing them in smaller parts.</p> <p>Create programs which use variables.</p> <p>Use variables, sequence, selection and repetition in programs.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently.</p>	<p><u>Digital Literacy</u> Children should consolidate/master the year five DL statements through projects which are linked to the topic.</p>	<p><u>Programming</u> Include use of sequences, selection and repetition with the hardware used to explore real world systems.</p> <p>Solves problems by decomposing them in smaller parts.</p> <p>Create programs which use variables.</p> <p>Use variables, sequence, selection and repetition in programs.</p> <p>Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently.</p>	<p><u>Digital Literacy</u> Children should consolidate/master the year five DL statements through projects which are linked to the topic.</p> <p>Project – Stop animation from the animals perspective 'How does nature view us'.</p>