



Bradwell Village School

Powerful Knowledge Progression Computing								
A Year Three child will come to Bradwell Village knowing:	Strand		Year Three	Year Four	Year Five	Year Six	A Year Six child will leave Bradwell Village knowing:	A KS3 child will learn:
Technology can be used for many different purposes in homes and schools. To use technology safely and respectfully, keeping personal information private. Identifying where to go for help and support when they are worried about anything they encounter online.	E-Safety – Online	Online Interactions	<p>To recognise when something encountered online does not feel right.</p> <p>To identify some of the risks of sharing publicly online.</p> <p>To understand some measures that can be taken to stay safe.</p>	<p>To learn about the benefits of sharing information online.</p> <p>To understand what types of information can put them at risk.</p> <p>To distinguish between personal and private information.</p> <p>To identify the characteristics of strong passwords.</p> <p>To apply characteristics of strong passwords to create new passwords.</p> <p>To create secure passwords with family members.</p>	<p>To explore and identify methods of communication and why people, communicate.</p> <p>To understand the risks and benefits of various modes of communication.</p> <p>To understand the concept of personal and private information.</p> <p>To understand safety rules and responsible behaviour when using new technologies.</p> <p>To explore the difference in communicating face-to-face and online.</p>	<p>To recognise the importance of never sharing passwords with people other than parents or guardians.</p> <p>To understand the importance of screen locks that protect devices.</p> <p>To know how to create safe passwords and to understand two-factor and two step verification.</p> <p>To choose the right security and customise privacy settings.</p> <p>By seeking help for oneself or others is a sign of strength.</p> <p>To know why and when to report abuse.</p> <p>To put what they have learnt about privacy and security into practise.</p>	A Year Six child will leave BSV knowing the importance of E-safety and risks going online can impose. They will also know how to keep themselves safe online and know to report anything that doesn't feel right. They will be able to make the correct decision on what sensible sharing and communication is.	A KS3 child will become more aware of the safer uses of technology as they will become more frequent at using it in their day to day lives. They will know how to identify 'fake news' and learn how to search the web efficiently.

<p>How to use technology purposefully to create, organise, store, manipulate and retrieve online content.</p>	<p>E-Safety – Online</p>	<p>Online Content</p>	<p>To raise awareness about appropriate and inappropriate content for online sharing.</p> <p>To understand the potential consequences of sharing without consent.</p> <p>To understand some of the ways we can protect ourselves against online manipulation.</p> <p>To understand the way the internet can make young people feel about themselves.</p>	<p>To empathise with those who have received hurtful messages.</p> <p>To judge what it means to ‘cross the line’ from harmless to harmful.</p> <p>To generate solutions for dealing with cyberbullying.</p> <p>Online Searching:</p> <p>To experiment with different keyword searches.</p> <p>To refine searches by using multiples words, synonyms and alternative words.</p> <p>To know what is meant by plagiarism explain when it is acceptable to use someone else’s work and how to write a citation.</p>	<p>To explore how and why we share information, give information and receive information.</p> <p>To understand the concept of personal safety / information in real life and online.</p> <p>To understand the concept of personal safety in real life and online and learn the SMART rules for when using the internet.</p> <p>To begin to make sensible and considered judgements about whether or not to trust online content and people when online.</p> <p>To understand cyber bullying and how to deal with it.</p> <p>Online Searching:</p> <p>To explore the validity of online content and be able to make sensible and considered judgements about whether or not to trust it.</p>	<p>To express feelings and opinions in a positive, effective way.</p> <p>To respond to negativity in constructive and civil ways.</p> <p>To make good decisions when choosing how and what to communicate and whether to communicate at all.</p> <p>To identify situations when it’s better to wait to communicate face to face with a peer than to text them right away.</p> <p>To be aware of online tools for reporting abuse and be able to consider when to use them.</p> <p>To talk about why and when to report abuse.</p>		
	<p>Powerful Vocabulary</p>	<p>privacy settings, keywords, online, sharing, consent, strong password, manipulation.</p>	<p>Privacy settings, keywords, copyright, strong, password, spam, virus, cyberbullying.</p>	<p>Personal information, reliable, cyberbullying, SMART, safe, meeting, accepting, tell.</p>	<p>Personal information, reliable, cyberbullying, SMART, safe, meeting, accepting, strong password, customise, harassment, report abuse.</p>			

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<p>What simple algorithms are and how they can be implemented on programs and that programs follow algorithms and instructions to work in order.</p>	<p>Programming</p>	<p>Developing and designing.</p>	<p>To understand that a program is a sequence of statements written in a programming language (scratch).</p> <p>To programme an animation that executes a sequence of statements.</p> <p>To understand that computer programs containing graphics use x y coordinates and turns are measured in degrees.</p> <p>To import, create and record sounds.</p> <p>To understand that algorithms and programs can involve repetition and predict the outcomes.</p> <p>To use a repeat function to draw a 2D shape.</p> <p>To import pictures and combine images, sounds and movements to create a personal animation.</p>	<p>To understand that a program is a sequence of statements written in a programming language (Turtle Art).</p> <p>To program a turtle to execute a sequence of statements.</p> <p>To understand that computer programs consist of statements that perform a specific task and can be altered.</p> <p>To amend an algorithm to change the size of a shape.</p> <p>To program a virtual robot to move and draw.</p> <p>To design a program that makes choices.</p> <p>To understand that commands and actions can be programmed to be executed depending on if a condition is true or not.</p>	<p>To understand that computer programs containing graphics use x y coordinates and turns are measured in degrees.</p> <p>To use conditional (if) statements and understand that some variables can be true or false (Boolean)</p> <p>To create a game that senses events on screen.</p> <p>To program statements that makes something happen in response to events on screen.</p> <p>To program statements that make something happen in response to the value of the variables.</p> <p>To identify an appropriately scoped project.</p> <p>To develop an outline of tasks and activities required to develop a project.</p> <p>To use the computational concepts of sequence, selection, repetition and variables to program a computer game.</p>	<p>To understand the difference between games and simulations.</p> <p>To identify the various inputs that computer games can use.</p> <p>To program a computer game by sequencing conditional statements.</p> <p>To understand that the behaviour of a computer program should be planned.</p> <p>To understand that programs are developed according to the plan.</p> <p>To program an algorithm to a plan.</p>	<p>A Year Six child will know a good understanding of how to programme a sequence (or more) of instructions for a purpose. They will understand that some variables may not be true or applicable and they will understand that for a computer to do something it must be programmed.</p>	<p>A KS3 child will learn how to use different programming languages to program and solve some computer related problems.</p>
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	Powerful Vocabulary	Program, sequence, selection, repeat, coordinates, X axis, Y axis, import, test, debug.	Program, sequence, selection, condition, repeat, test, debug.	Sequence, selection, condition, repeat, Boolean, variable, coordinates, X axis, Y axis.	Sequence, selection, condition, repeat, variable. Procedure, test, debug.		
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How to log into a device used in school and begin to use a mouse accurately. They will know how to open and use some programs like the internet.	Functional skills	<p>To turn on a log into any computer device used in school.</p> <p>To recognise and use different software on a computer.</p> <p>To use a mouse and a keyboard accurately.</p> <p>To know the different parts of a computer.</p> <p>To use the correct posture when using a computer device.</p>	<p>To log into different computer devices used in school e.g. Laptop or Chrome Book.</p> <p>To save a file onto a folder on the drive.</p> <p>To know how to form upper case and lower-case letters when typing.</p> <p>To find and open an already existing file on the system.</p> <p>To share and download files online.</p>	<p>To log into and solve minor problems linked to logging in.</p> <p>To create a folder for a purpose.</p> <p>To save multiple files in one location.</p> <p>To delete or move files from a location.</p> <p>To type with progressive speeds of up to 15 words per minute.</p> <p>To find and attach files to emails.</p>	<p>To log in and change passwords when needed.</p> <p>To fix minor issues arising with passwords and change of passwords.</p> <p>To create shortcuts on a software for easy accessibility.</p> <p>To type with accuracy of up to 15 words per minute.</p>	<p>How to use a computer and various functions on a computer.</p> <p>They will be able to solve basic log in issues.</p> <p>To type with some accuracy with up to 15 words per minute.</p>	<p>A KS3 child will be able to fix basic 'bugs' in computers with general usage.</p> <p>They will understand how to move files and programmes around.</p> <p>To save files and programmes in different locations.</p>
	Powerful Vocabulary	Mouse, keyboard, parts, posture, software	Log-in, devices, file, folder, typing, online, download	Problem solving, folder, files, typing, attachments	Log-in, problems, password, software, accuracy	Type, accuracy, problem-solving, functions, computer	Problem solving, bugs, programme, files, save, document, location