







Overview Computing Year 3

-Computational Thinking

-Digital Literacy and Online Safety

-Computers and Hardware

	Autumn Term		Spring Term		Summer Term	
Big Question	What was here before me?		How do living things survive?		What creates change?	
Other Subject links	Prehistoric (dinosaurs), Stone Age, light, fossils, rocks & soil, map skills.		Bronze age & their trading routes in the Middle East, food & diet. Iron age		Romans Forces and magnets/Materials (science)	
	Autumn 1 -	Autumn 2 -	Spring 1 -	Spring 2 -	Summer 1 -	Summer 2 -
	<p>Video Trailers</p> 	<p>Comparison Cards Databases</p> 	<p>Journey inside a Computer</p> 	<p>Programming Scratch</p> 	<p>Emailing</p> 	<p>Networks and the Internet</p> 
National Curriculum	<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 given goals, including collecting, analysing, evaluating and presenting data and information - Use search technologies effectively, appreciate how results are selected and ranked, and be 	<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 given goals, including collecting, analysing, evaluating and presenting data and information 	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration. - Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report 	<ul style="list-style-type: none"> - Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration. - 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,

	<p>a) I understand the need to keep personal information and passwords private.</p> <p>b) I understand that if they make personal information available online it may be seen and used by others</p> <p>c) I know how to respond if asked for personal information or feel unsafe about content of a Message.</p> <p>a) I can review images on a camera and delete unwanted images.</p> <p>b) I can download images from a camera into files on the computer.</p> <p>c) I can use photo editing software to crop photos and add effects.</p> <p>d) I can copy graphics from a range of sources and paste into a desktop publishing program.</p>	<p>a) I can recognise that cyber bullying is unacceptable and will be sanctioned in line with the schools policy</p> <p>b) I know how to report an incident of cyber bullying.</p> <p>c) know the difference between online communication tools used in school and those used at home.</p> <p>a) I can combine text, image and sounds and show awareness of audience</p> <p>b) I know how to manipulate text, underline text, centre text, change font and size and save text to a folder.</p>	<p>a) I understand the need to develop an alias for some public online use</p> <p>a) I can combine text, image and sounds and show awareness of audience.</p> <p>b) I know how to manipulate text, underline text, centre text, change font and size and save text to a folder.</p>	<p>a) I can recognise that cyber bullying is unacceptable and will be sanctioned in line with the schools policy</p> <p>b) I know how to report an incident of cyber bullying.</p> <p>c) know the difference between online communication tools used in school and those used at home.</p> <p>a) I can experiment with variables to control models.</p> <p>b) I can use 90 degrees and 45 degrees turns.</p> <p>c) I can give an on-screen robot directional instructions.</p> <p>d) I can draw a square, rectangle and other regular shapes on screen, using commands.</p> <p>e) I can write more complex programs.</p>	<p>a) I understand the need for rules to keep them safe when exchanging learning and ideas online</p> <p>b) I understand the need to keep personal information and passwords private.</p> <p>a) I can use the email address book.</p> <p>b) I can open and send an attachment.</p> <p>c) I can "Save picture as" to save an image to a computer.</p> <p>d) I can copy and paste text into a document.</p> <p>e) I can search for an image, then copy and paste it into a document.</p>	<p>a) I can recognise that information on the internet may not be accurate or reliable and may be used for bias, manipulation or persuasion.</p> <p>b) I understand that the internet contains fact, fiction and opinion</p> <p>c) I can use strategies to verify information, eg cross-checking</p> <p>d) I understand the need for caution when using an internet search for images and what to do they find an unsuitable image</p> <p>f) I understand that copyright exists on most digital images, video and recorded music</p> <p>a) I can find relevant information by browsing a menu.</p>
Vocabulary	edit, film, film editing software, graphics, import, plan, recording,	categorise, data, database, fields, filter, graphs, charts, record, sort, spreadsheet.	CPU, data, desktop, GPU, Hard Disk Drive HDD, QR	algorithm, animation, computer, computer program (app), code, code block, debug,	log on, log off, mouse, password, username, application,	DSL, file, internet, network, map, router,

	sound effects, video, voiceover.		code, RAM, ROM, tablet device, trackpad.	decompose, interface, loop, predict, program, remix, repetition, review, sprite, tinker.	cyberbullying, spam, avatar, text speak, autocomplete, account, attachment, BCC, CC, domain, email, emoji, information.	server, the cloud, wifi, wired, wireless.
Computer program/s and/or devices needed	iPads iMovies	Databases - Google Sheets/Excel		Scratch	Internet Access	Internet Access