Statement of Intent:

At Crockerton School, we aim to teach pupils' computer literacy so that they can access the digital world in a safe, useful and meaningful way; be wise and discerning about information they encounter; communicate online with respect, maturity and safely.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	* Know that they may see something online or on screens that upsets them or makes them feel uncomfortable. * I understand that access to online content should be adult initiated.	*Understand where to go for help or support when they have concerns about content or contact on the internet or other online technologies.	* Use technology safely and keep personal information private.	*Use technology safely and respectfully, keeping personal information private. * Use technology safely and recognise acceptable and unacceptable behaviour.	* Use technology responsibly and understand that communication online may be seen by others. * Understand where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	* Understand the need to only select age appropriate content.	* Use technology respectfully and responsibly. * Identify a range of ways to report concerns about content and contact in and out of school.

Crockerton CE Primary - Computing Progression

Online Safety

Key Vocabulary:

screens: TV, television, tablets, mobile phones, games console, laptop, computer uncomfortable upsetting	*technology, personal information, privacy, contact, content, online, trusted adult, inappropriate*		*Cyber bullying, digital footprint, passwords, World Wide Web and internet (revisit for Year 4s linked to networks), e-safety, mental health and wellbeing, acceptable, unacceptable*		*age restrictions, age appropriate, social media platforms, online gaming, communication, responsible, online citizenship, screen shot, informed choices*

Personal, social and Emotional Development: Self regulation - set and work towards simple goals being able to wait for what they want and control their immediate impulses, when appropriate. - give focussed attention to what the teacher says responding appropriately even when engaged in activity and show an ability to follow instructions involving several ideas or actions.	National Curriculum Objectives KS1: * 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.		National Curriculum Objectives KS2: * Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.		

Net Searching

* Know that the internet can be used to find out about the world. * Discuss information that an adult finds out from the internet.	*Understand where to go for help or support when they have concerns about content or contact on the internet or other online technologies.	*Use search technologies safely. * Use simple search technologies	* Use simple search technologies and recognise that some sources are more reliable than others.	* Understand how results are selected and ranked by different search engines.	* Use filters in search technologies effectively. * Appreciate how results are selected and ranked.	* Be discerning when evaluating digital content.

Key Vocabulary:

internet, search, safe	*search engine, safe searching, web address, address bar, search bar*	*information, search tools, reliability, sources, search results, ranking, advert, wiki, .edu, .sch, .org, .com, .co.uk, .ac*	*Boolean operators, search terms, URL, Domain name, protocol, reliability, scheme, second-level domain, secure, subdomain, top-level domain, trustworthy*

	ELG: Understanding the World - Past and Present - People, Culture and Communities - the Natural World	National Curriculum Objectives KS1: *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.		National Curriculum Objectives KS2: * Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.			
Networks	* I know similarities and differences in which people communicated in the past and now.	* Understand that networks enable the sharing of data and information.	* Use a network to share data and information.	* Understand that the internet is a large network of computers and that information can be shared between computers.	* Understand what servers are and how they provide services to a network.	* Use the internet to allow me to share data with another person.	* Understand how computer networks enable computers to communicate and share information. * Use and combine services on the internet to share information.
	Key Vocabulary:						
	internet, email, message (text)	*network, device (light touch)*		*Device, wireless, internet, network, server*		*internet, data, communication, collaboration, networks*	

	ELG: Past and Present. * Know similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.	National Curriculum Objectives KS1: * Use technology purposefully to create, organise, store, manipulate and retrieve digital content.		National Curriculum Objectives KS2: * 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.			
Computers	* I recognise technology in school.	* Recognise common uses of information technology in the home and school environment.	* Recognise common uses of information technology beyond school.	* Recognise familiar forms of input and output devices and how they are used. * Make efficient use of familiar forms of input and output devices, such as keyboards and printers.	* Use other input devices such as cameras.	*Use other input devices such as sensors.	*Use a range of input and output devices.
	Key Vocabulary:						
	technology, camera	device, screen, information technology, mouse, keyboard		input, output, monitor, keyboard, camera, microphone, printer, speaker		Light sensor, sound sensor, volume, levels	

	ELG: People, culture and communities. * Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps.	National Curriculum Objectives KS1: * Recognise common uses for technology beyond school.		National Curriculum Objectives KS2: *Use sequence, selection and repetition in programs; work with various forms of input and output.			
Using Computers	Use technology to create digital content.	Use technology purposefully to create digital content.	*Use technology purposefully to organise, store, retrieve and manipulate digital content. *Use technology purposefully to create digital content, comparing the benefits of different programs.	With support, select and use a variety of software to accomplish goals.	With support, select and use a variety of software on a range of digital devices to accomplish given goals.	* Independently select and use appropriate software for a task. * Independently select, use and combine a variety of software to design and create content for a given audience.	* Design and create content for a given audience. * Independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information.
	Key Vocabulary:						
	Type, keyboard, keys	*Name, save, retrieve, font, edit, spacebar, backspace*		*Program, animation, editing, slides, presentation, sound bites*		*Data, analyse, present, graphs, charts, spreadsheet, gather*	

| ELG: Writing. Children at the expected level of development will: * Spell words by identifying sounds in them and representing the sounds with a letter or letters; * Write simple phrases and sentences that can be read by others. | National Curriculum Objectives KS1: *Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | National Curriculum Objectives KS2: *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. |

Programming						
*Program simple digital devices.	*Predict the behaviour of a simple program. *Understand what algorithms are and how they are implemented on digital devices.	*Use logical reasoning to predict the behaviour of a simple program. *Create simple programs. *Debug simple programs. *Debug simple programs by using logical reasoning to predict the actions instructed by a code. *Understand that programs execute by following precise and unambiguous instructions.	*Design, write or debug programs that control or simulate virtual events. *Use logical reasoning to explain how algorithms work.	*Decompose programs into smaller parts. *Use logical reasoning to detect and correct errors in algorithms and programs. *Select, use and combine a variety of software systems and content that accomplish a given goal.	*Design, input and test an increasingly complex set of instructions to program a device. *Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. *Design, write and test simple programs with opportunities for selections, where a particular result will happen based on actions or situations controlled by the user. *Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency.	*Include use of sequences, selection and repetition with the hardware used to explore real world systems. *Solve problems by decomposing them into smaller parts. *Create programs which use variables. *Use variables, sequence, selection and repetition in programs. *Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently.
Key Vocabulary:						
Equipment, movement, buttons, stop, go, turn, forward, back, backwards	*Algorithm, program, bug, debug, predict*		*Sequence, detect bugs, test and improve, design, write, simulate*		*Procedures, variable, selections, solutions*	

ELG Expressive Arts and Design Creating with materials	National Curriculum Objectives KS1:	National Curriculum Objectives KS2:
* Safely use and explore a variety of ~~materials~~, tools and techniques, experimenting with ~~colour~~, design, ~~texture~~, ~~form~~ and function. * Share their creations, explaining the process they have used.	* 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.	* Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. * Use logical reasoning to explain how simple algorithms work and to detect and correct errors in algorithms and programs.

Sequencing of learning – why now?

Term 1 – Online Safety	Term 2 – Net Searching	Term 3 – Networks	Term 4 – Computers	Term 5 – Using Computers	Term 6 – Coding
Pupils are taught how to use the internet and technology safely at the beginning of the year to set expectations prior to using internet for a range of purposes. This is revisited throughout the year in Values lessons and on whole school safety days, as well as through Term 2 Net Searching.	Pupils build upon online safety skills and develop net searching skills – many of which are linked to being discerning of information and provide a deeper level of online safety, as well as providing opportunities to apply safe internet use. This term is pre-teaching for next term's understanding of networks.	Pupils build upon their understanding of the internet, from last term, by seeing it as a network and a place that content can be made – opportunities for revisiting Term 1's online safety with producing appropriate content. Pupils have a growing confidence of logging into and accessing the internet by this term, after prior learning.	Pupils extend their learning of using the internet and finding content on computers, chrome books and tablets to understanding technology beyond these devices to understanding and using further input and output devices but being able to link these to familiar devices with growing competence with computer skills.	Extend learning of input and output devices to use these to create content for a range of purposes, combining skills and understanding of technology with growing purpose.	In Term 5, pupils have explored input and output devices some of which (KS2) have involved a very basic level of code writing in order to make them function. Develop this understanding by writing further and more complex codes that involve familiar devices as well as new ones.