Coleham Primary School COMPUTING Progression (cumulative knowledge)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
COMPUTER SKILLS	Operate simple technology equipment and simple software; create simple content; use the internet with adult supervision.	 Know how to create text using Microsoft Word. Know how to create shapes using brushes and colours in Paint. 	Know how to combine text and images using Microsoft Word To know how to print, save, close and open a saved file	Know how to combine text, images, Word Art, bullet points and colour effects using Publisher. Use a keyboard confidently to create text using Microsoft Word.	Know how to create a PowerPoint Presentation.	 Know how to create a green screen video using the Do Ink or iMovie app. Know how to edit and improve text using Microsoft Word features. Know how to create a PowerPoint presentation, including hyperlinks. 	 Know how to create a Spreadsheet, enter data and change data into a graph using Excel. Know how to apply advanced computer skills using PowerPoint, Word or Publisher software.
CREATIVITY iPad apps and software by phase groups	To gain experience of technology in other areas of the curriculum. iPad apps: Book Creator Puppet Pals Little writer/digits Camera and video function Scribblify Software: Paint Internet Browser	To use technology in other areas of the curriculum with guidance from adults. iPad apps. As previous years, and: Chatterpix Google Earth Kahoot Software. As previous years, and: Word 2 Paint		To use a variety of software on digital devices to create content in other areas of the curriculum. iPad apps. As previous years, and: Explain Everything Do Ink (Green Screen) Thinglink PhotoSpeak Comic Life Clips Keynote (Bit like Powerpoint - Year 4) Software. As previous years, and: PowerPoint (Year 4) Publisher Google Expeditions Photos Comic Life		To independently suggest and use a variety of software on digital devices that can enhance other areas of the curriculum. iPad apps. As previous years, and: Garageband iMovie I can animate iMotion Lego Movie Maker Do Ink (Green Screen) Teleprompter Software. As previous years, and: QR Code Generators Excel (Year 6) Photostory	
PROGRAMMING	Program a simple electronic device	Discovery Education Block Coding lesson plans: Level 1 Build animated scenes where several objects move at the same time; move when the program starts or move/disappear when they are clicked on Debug mistakes in programs using the codes they have been practising	Discovery Education Block Coding lesson plans: Level 2 Build animated scenes where different keys on a keyboard are used to make objects move in different directions, stop, hide, show and turn. To build animated scenes where objects respond to a pointer; a click; a mouse or a keyboard in the same program; and a combination of different kinds of buttons and actions. Debug mistakes in programs using the codes they have been practising	Discovery Education Block Coding lesson plans: Level 3 Program sequences by putting blocks of code in a particular order that they would like actions to happen in simple animations and simulations. Create code with conditional hit events, which select different pieces of code to execute depending on what happens to objects. Debug mistakes in programs using the codes they have been practising	Discovery Education Block Coding lesson plans: Level 4 Use variables to count things, keep track of what is going on and then create simple games which use a score or time variable. Debug 'variables' mistakes in programs using the codes they have been practising. Use a repeating loop to save having to write the same code over and over again.	Discovery Education Block Coding lesson plans: Level 5 Use key press events to control the co-ordinate position, the speed and direction of an object. Use speed, direction and coordinates coding knowledge to debug mistakes in programs Use random numbers to control certain properties in a program, making things less predictable and more interesting.	Discovery Education Block Coding lesson plans: Level 6 Use variables in more complex ways and to manipulate inputs to create useful outputs. Use your complex variables coding knowledge to fix the mistakes in a variety of programs. Use code to detect the properties of objects and apply these parameters (an object's properties) so that they can be used in some way when creating a game.

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	iPad apps: Bee-bot	iPad apps: Daisy the Dinosaur	<u>iPad apps:</u> Lightbot Hour	iPad apps: A.L.E.X	iPad apps: Scratch Junior	iPad apps:	iPad apps: Pyonkee (Version of Scratch for
	Tynker Junior	Daisy the Dinosaur	Lightbot Hour	A.L.E.X	Tynker (Hour of Code)	Hopscotch	iPads)
Programming apps, software and hardware by year group	Hardware: Beebots Ozobot					Software: Scratch – learn the basics of scratch coding.	Software: Kodu Scratch – Apply scratch coding learnt last year to create a basic game for others to play. Crumble – Applying code to a motorised project in D.T. Hardware: Microbit – Pocket-sized computer
COMPUTING IN SOCIETY	 Know that information can be retrieved from digital devices and the internet. Show an interest in technological toys, real technological objects such as cameras, and touchscreen devices such as mobile phones and tablets. 	Identify technology used at school and home and look for similarities and differences.	 Identify technology used at school, home and public places. Explore the school website, its content and how it is organised. Search the internet using one keyword. 	 Know what a network is. Search the internet using several key words. Understand that not all information on the internet is truthful. Know who Mary Coombs was (the first woman in Britain to program a commercial computer), her life, achievements and their impact. 	 Understand how the school network is organised. Identify how word selection and word order affects search results. Evaluate webpages. Begin to be more discerning about information found on the internet. Know who Bill Gates is, his life, achievements and their impact. 	 Know the difference between the internet and the world wide web. Know how search results are selected, ranked and displayed and choose relevant webpages. Be discerning about information found on the internet. Know who Steve Jobs was, his life, achievements and their impact. 	 Understand how the internet provides an opportunity to communicate and collaborate and its advantages. Continue to evaluate webpages and their relevance. Be critical of information found on the internet. Know who Alan Turing was, his life, achievements and their impact.
E-SAFETY	national College.com National Online Safety lesson plans: EYFS Self-image & Identity • Recognise sad, angry, worried and scared emotions Online Relationships • Give examples of how they use technology with people they know. Online Reputation • Know ways that they can put information on the internet. Online Bullying • Know that some people can be unkind online. Health, Wellbeing & Lifestyle • Know that there are rules to help keep us safe and healthy in school and at home when using technology. Privacy & Security • Know some simple examples of personal information and	national College.com National Online Safety lesson plans: Year 1 Self-image & Identity • Tell a trusted adult if something happens that makes them feel sad online. Online Relationships • Know when they should ask permission to do something online. Online Reputation • Know what information I should not put online without asking a trusted adult first. Online Bullying • Know how to be kind online. Health, Wellbeing & Lifestyle • Know some rules to keep us safe and healthy in school and at home when using technology. Privacy & Security • Know some examples of personal information and	national College.com National Online Safety lesson plans: Year 2 Self-image & Identity Give examples of issues online that might make someone feel sad, and how they might get help. Online Relationships Know who they should ask before sharing things about themselves or others online. Online Reputation Know who to talk to if something has been put online without consent or if it is incorrect. Online Bullying Know what online bullying is and how it can make someone feel. Health, Wellbeing & Lifestyle Understand how rules for using technology in different settings (e.g. home, school) can help us.	 national College.com National Online Safety lesson plans: Year 3 Self-image & Identity Know what is meant by the term 'online identity'. Online Relationships Understand how someone's feelings can be hurt by what is said or written online. Online Reputation Know why they don't want certain information to be shared by themselves or by someone else. Online Bullying Know how to behave towards other people online and why this is important. Health, Wellbeing & Lifestyle Know why spending too much time using technology can sometimes have a negative impact Understand why some online activities have age 	national College.com National Online Safety lesson plans: Year 4 Self-image & Identity Know the importance of interacting positively with others online Online Relationships Recognise healthy and unhealthy online behaviours. Online Reputation Know that information about anyone online could have been created, copied or shared by others. Online Bullying Know that people need to think about how content they post can affect others and how it may affect how others feel about them. Health, Wellbeing & Lifestyle Know strategies to help with limiting the amount of time they use technology. Privacy & Security	national College.com National Online Safety lesson plans: Year 5 Self-image & Identity Make responsible choices about having an online identity. Online Relationships Know that there are some people who may try to communicate with them online who may want to do them or their friends harm. Online Reputation Know that online information about anyone can be used by others to make incorrect judgments about an individual. Online Bullying Online bullying (Cyberbullying) can be different to bullying in the offline world. Health, Wellbeing & Lifestyle Know ways that technology	 national college.com National Online Safety lesson plans: Year 6 Self-image & Identity Know why it is important to challenge and reject inappropriate online content. Online Relationships Know that choosing to share something online may have an impact either positively or negatively. Online Reputation Know ways to protect their online reputation. Online Bullying Know how to capture bullying content as evidence to share with others who can help them. Health, Wellbeing & Lifestyle Limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture,

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	that they need to be careful who they tell it to	who would be trustworthy to share this information with	Privacy & Security • Know what is meant by 'private' and 'keeping things private'.	restrictions Privacy & Security • Know strategies for creating and keeping passwords private.	Know that internet use is never fully private and is monitored Know that some online services may seek consent to store information about them. Know what the digital age of consent is.	can affect health and wellbeing positively. Seek permission from a trusted adult before purchasing additional content (e.g. in-app purchases, loot boxes) on apps and games. Privacy & Security Understand how many free apps or services may read and share private information with others. Know what app permissions are.	sleep, diet and exercise). Recognise features of persuasive design in games and apps to keep users engaged. Privacy & Security Know how to identify illegal online content, phishing emails and scam messages	
ACCEPTABLE USE POLICY	Coleham School Acceptable Use Policy for KS1. I will: Show my teacher if I get a nasty message Not reply to any messages which make me feel sad or worried Make sure all messages I send are polite Not upload photographs of myself without asking my teacher Only communicate with people I know in real life Not tell people about myself online. (I will not tell them my name, anything about my home, my family, my school or my pets.) Never agree to meet a stranger Check with a teacher before using the internet Only open website pages which a teacher has said are OK Tell a teacher if anything makes me feel scared or unhappy on the internet Only email people I know and if a teacher agrees it is OK			Coleham School Acceptable Use Policy for KS2. I will: Look after computing equipment including respecting the internet Not use my own mobile phone or other electronic device in school. Make sure all messages I send are kind and respectful. Not reply to any nasty message which makes me feel unhappy or worried. Show a responsible adult anything online that makes me feel unsafe, worried or uncomfortable. Not reply to strangers and report messages from strangers straight away to my teacher. Always keep my personal details private. (My name, family information, journey to school, my pets and hobbies are all examples of personal details.) Talk to a responsible adult if a friend I've met online wants to meet me. Never arrange to meet an online friend by myself. Only share messages and images that are legal. Always check with a responsible adult before I share images of myself or others. Only give my mobile phone number to friends I know and trust in real life. Always keep my passwords safe and not share them with anyone. In school time, only email people who my teacher has given me permission to email. Only visit websites which my teacher has asked me to use. Not click on 'pop-ups' on my screen. Tell my teacher about them.				