



Frimley Church of England School

Approach to Computing



Purpose Computing is a subject which gives us an insight into how digital systems work and are applicable to the world around us.

Intent

Our vision is to develop a culture where the use of technology becomes second nature to our pupils, thus ensuring they are ready and able to embrace the technological advances of the future. Our plan is for every child to have their own iPad which is used as an additional learning tool within the classroom. Used effectively, technology has the ability to enhance the teaching and learning process enabling children to develop essential skills, apply and embed their knowledge and understanding of the world around them whilst also providing them with an opportunity to express themselves and their learning through a creative medium of their choice. The Gallop study found that 81% of educators found that technology-based lessons helped to foster a sense of creativity, develop critical thinking and problem-solving skills. 'The Future of Jobs' report from the World Economic Forum ranks these skills among the 10 most demanded skills today for the future. The innovative use of technology combined with a traditional learning approach, prepares children for their next stage of learning and their future beyond.

Implementation

Computing is carefully planned for throughout lessons across the curriculum in accordance with the National Curriculum objectives. In addition, objectives are further supported by a clear knowledge and skills progression document to ensure that key skills and knowledge are developed and built upon as they progress through the school. The computing curriculum is made up of three strands: digital literacy, information technology and computer science. Through these strands, children have the opportunity to learn and apply a variety of concepts from designing, creating and debugging their own programs to accessing information, evaluating its suitability, tailoring it to meet their own needs, learning how to store it and share it with others. There is a big focus on digital literacy throughout all subjects where children learn how to use ICT safely, respectfully and responsibly and understand the impact that technology can have upon themselves and others. Our children are taught when and how to report concerns about content or contact.

In lessons, children will have regular access to the hardware (mobile devices and programmable equipment) and software that they need to enable them to develop an understanding of digital systems and their applications. These are planned for and taught within an exciting and meaningful context to help them to see the links and make better connections with the world around them and transfer the skills they learn across the curriculum. Children are regularly given opportunities to express themselves through the use of a range of multimedia tools.

Monitoring of provision will be an ongoing process throughout the academic year. The ICT lead and Designated Online Safeguard Lead will together monitor the use of technology and its impact upon the children's teaching and learning in class through: lesson flipcharts (including teacher models and inputs, learning scaffolds, resources used and learning activities), learning outcomes through the scrutiny of work and by using pupil and staff voice – both formally and informally. Subsequent actions will be taken in response to all formats of monitoring to continually improve the provision. Within lessons, teachers will use tools such as Apple Classroom to make learning visible to all. Digital Leaders also regularly monitor the learning experiences in class and feed back to the ICT lead during meetings so that we are continually reviewing our practice.

Impact

Children will leave Frimley as more competent, independent and digitally literate people with an increased understanding of how technology works and its connection with the world around them. They will have developed and applied key skills such as creativity, critical thinking and problem solving whilst doing so.

In classrooms you will see and hear:

- Children using a range of multi-media apps confidently and competently to support and extend their learning across all curriculum subjects, within and beyond the classroom walls
- Children using technology to create memorable learning experiences which support the retrieval of key knowledge and the application of essential skills
- Children using technology creatively to express their understanding in innovative and exciting ways
- Children who are excited by and engaged in their learning who as a result take more ownership of the learning process
- Children collaborating in tasks in new and innovative ways
- Children confidently sharing their learning with others
- Digitally literate children who know how to use the internet safely, respectfully and responsibly who understand that their actions have a direct impact on others.

By the end of children's time at Frimley they should be able to:

- 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.
- Understand computer networks including the internet; such as the world wide web; and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- 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 technology safely, respectfully and responsibly;

Computing Long term plan

For Digital Literacy: Health Well-being and Lifestyle, Privacy and Security

	Year 3	Year 4	Year 5	Year 6
Online Safety is taught throughout the year as part of Tech Thursday assemblies, Computing lessons and PSHE, and when needed in year groups				
Autumn 1	For Digital Literacy: Respect and technology, Digital Leader Launch, Self-image and Identity Sound (Garage Band) Narrating Dragon Narratives	For Digital Literacy: Respect and technology, Digital Leader Launch, Self-image and Identity Presentation and Video (Keynote and Imovie)	For Digital Literacy: Respect and technology, Digital Leader Launch, Self-image and Identity Photography and Digital Art- Science Lifecycles Animations (Keynote)-Science Lifecycles	For Digital Literacy: Respect and technology, Digital Leader Launch, Self-image and Identity Word Processing and Typing (Pages) Yellow Spotted Lizards non-chronological report – Pages)
Autumn 2	For Digital Literacy: Online Relationships, Online Reputation	For Digital Literacy: Online Relationships, Online Reputation Photography and Digital Art (Keynote)	For Digital Literacy: Online Relationships, Online Reputation Presentations (Keynote) History Enquiry – The Anglos Saxons Video (iMovie) English – record an Anglo-Saxon Battle Cry	For Digital Literacy: Online Relationships, Online Reputation Presentations and Sound (Keynote) The achievements of the Victorians
Spring 1	For Digital Literacy: Online Reputation, Online Bullying Networks and Systems – Networks Presentations (Keynote) History Video (Clips)-Prehistoric jewellery Instructions Animations (Keynote)- Fossilisation Process	For Digital Literacy: Online Reputation, Online Bullying Networks and Systems – The Internet Sound (Garage band) Creation of Science Soundscape Sound	For Digital Literacy: Online Reputation, Online Bullying Networks and Systems – Search Engines Sound (Garage Band) To record The Eagle piece of writing. Word Processing (Pages) Non-chronological report about a planet	For Digital Literacy: Online Reputation, Online Bullying Networks and Systems – Search Engines and reliability of information Video (iMovie) – Nature Documentary
Spring 2	For Digital Literacy: Managing Online Information, Health Well-being and Lifestyle Networks and Systems – Networks Computer Science – use of commands and sequencing. Photography and Digital Art (Keynote) Egyptian Headdresses	For Digital Literacy: Managing Online Information, Health Well-being and Lifestyle Networks and Systems – The Internet Mindmap (Numbers)	For Digital Literacy: Managing Online Information, Health Well-being and Lifestyle Networks and Systems – Search Engines Sound (Garage Band) To record The Malfeasance Poem.	For Digital Literacy: Managing Online Information, Health Well-being and Lifestyle Networks and Systems – Search Engines and reliability of information Video (iMovie) – The Holocaust Photography and Digital Art – Show not tell activity linked to mental health
Summer 1	For Digital Literacy: Health Well-being and Lifestyle, Privacy and Security Word Processing and Typing (Pages) Video (iMovie)	For Digital Literacy: Health Well-being and Lifestyle, Privacy and Security Computer Science – use of repetition in programs (For and While Loops) Word Processing and Typing	For Digital Literacy: Health Well-being and Lifestyle, Privacy and Security Computer Science – conditional code using if, then/else for conditions, Presentations (Keynote) Geography Enquiry – Biomes Model (Keynote) Melting Process (Science/ Geography) Video	For Digital Literacy: Health Well-being and Lifestyle, Privacy and Security Video and Animations (green screen and Clips) – The Circulatory System
Summer 2	Data Handling (Numbers) Plants Mindmaps/Maths Photography and Digital Art-Pointillism Nature Animations (Keynote) Plant Pollination Process	Sound (GarageBand) and Animations (Keynote) Water Cycle Soundscape (Garage band)	Data Handling (Numbers) Geography traffic survey Word Processing (Pages) Letter to MP traffic/parking/litter	Computer Science – variables Data Handling (Numbers) Statistics in Maths Word Processing and Typing and Presentations - Poetry eBook

What Frimley offers to its pupils: (Computing medium term plans)

		Year 3	Year 4	Year 5	Year 6
Autumn term	Knowledge	<u>Sound (Garage Band)</u> <u>Narrating Dragon Narratives</u> <ul style="list-style-type: none"> • I know how to experiment with live loops to create a song or add sound effects to a piece of work. 	<u>Presentation and Video (Keynote and Imovie)</u> <u>Digestion Process</u> <u>Presentation</u> <ul style="list-style-type: none"> • I can create a presentation that includes a range of multimedia. • I can create an interactive presentation and begin to use hyperlinks. • I can create and export a presentation. 	<u>Photography and Digital Art</u> <u>Science Lifecycles</u> <ul style="list-style-type: none"> • I know how to make a digital photo using camera settings • I know how to enhance digital photos and images using crop, brightness and resize tools • I know how to link and explain how to photoshop images and how this is used in the media. 	<u>Word Processing and Typing</u> <u>(Pages) Yellow Spotted Lizards non-chronological report – Pages)</u> <ul style="list-style-type: none"> • I know how to confidently choose the best application to demonstrate my learning.
	Crucial Learning	<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>*Apps allow us to create and share information in an engaging way to an audience.</i> <i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>	<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>* Apps allow us to present and communicate information in an engaging way to an audience.</i> <i>*The Keynote app is a powerful presentation tool.</i> <i>* The iMovie app allows you to combine different media to create memorable videos.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>	<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i>	<i>* Apps allow us to communicate information in an engaging way to an audience.</i> <i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i> <i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i> <i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>
	Knowledge		<u>Video</u> <ul style="list-style-type: none"> • I can add music and sound effects to my films • I can add animated titles and transitions. • I can add simple subtitles to a video clip. • I can start to use green screen to add animated backgrounds. 	<u>Animations (Keynote)</u> <u>Science Lifecycles</u> <ul style="list-style-type: none"> • I know how to record animations of different characters and edit them together to create a video. • I know how to add green screen effects to an animation. • I know how to use digital drawings to create an animation and can export it as a Gif or video. 	<u>Presentations and Sound (Keynote) The achievements of the Victorians</u> <ul style="list-style-type: none"> • I can create an engaging presentation which uses a variety of multimedia, animations, transitions and effects to communicate information for a set purpose and audience. • I can evaluate my own content, suggest ways and make improvements. • I know how to add voice over and edit sound clips (volume, pitch, fade, effect) to use in a film or radio broadcast (podcast). • I know how to compose a soundtrack that can be added to a film project.

	Crucial Learning		<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
	Knowledge		<p><u>Photography and Digital Art (Keynote)</u></p> <p><u>Turning themselves into Greek Gods</u></p> <ul style="list-style-type: none"> • I know how to enhance digital images and photographs using crop, brightness, contrast & resize • I know how to manipulate shapes to create digital art. • I know how to draw a series of images and export as an animated GIF 	<p><u>Presentations (Keynote) History Enquiry – The Anglos Saxons</u></p> <ul style="list-style-type: none"> • I can create an interactive presentation that includes a variety of media, animations, transitions and other effects. • I know how to collaborate with peers using online tools. • I can sequence clips of mixed media in a timeline and record a voiceover. 	
	Crucial Learning		<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>*Green screen is an effect which allows an image or video to be superimposed in front of another image or movie.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>*The Clips app turns photos, videos and audio into engaging videos.</i></p>	
			<p><u>Video (iMovie)</u></p> <p><u>English – Write and record an Anglo-Saxon Battle Cry</u></p> <p>I can use Green screen as an effect which allows an image or video to be</p>		

				superimposed in front of another image or movie. I chose my background which matched my tone and voice Video (iMovie)	
				<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i> <i>*The Keynote app is a powerful presentation tool.</i> <i>* The iMovie app allows you to combine different media to create memorable videos.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>	
	Theology and vision links	Children constantly review the moral dilemmas that technology can expose them to and consider how a Christian would respond. This can be done through the use of a quote from Philippians 4:8 'Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things'			
Spring term	Knowledge	<u>Computer Science Networks and Systems</u> <ul style="list-style-type: none"> • I understand what a network is • I understand that our classroom computer is part of a school network. • I can explain why computers are networked. • I can identify and name some of the physical components that make up a network. • I can identify input and output devices • I can explain how data travels between devices. 	<u>Computer Science Networks and Systems</u> <ul style="list-style-type: none"> • I can identify the different components that make up a network. • I understand that there are different types of networks such as Local Area Network and Wide Area Network. • I know that the Internet is a network of computers connected to each other all around the world (an example of a WAN). • I understand how computers and different devices connect to the internet using agreed rules or protocols. • I understand how web pages are viewed across the internet. • I can describe some of the services the internet provides such as finding, sharing and communicating information. • I understand what a search engine is • I can start to use key words to refine a search. • I can explain the difference between a web browser and a search engine. 	<u>Computer Science Networks and Systems</u> <ul style="list-style-type: none"> • I can explain how a computer network works. • I can explain what the Internet is. • I can explain the differences between LAN and WAN. • I can explain the differences between the internet and the www. • I understand that computers connected to the internet have their own IP address. • I can explain how information is shared over the internet. • I can describe the opportunities the internet provides for communication, sharing and collaboration. • I understand that hacking is where the content of something has been changed by someone else. • I can describe how search engines search for information using age. appropriate and secure search engines 	<u>Computer Science Computer Networks and Systems</u> <ul style="list-style-type: none"> • I can explain what a computer network is and how it works • I can explain what the internet is and the difference between the Internet and the WWW. • I know that webpages are written in HTML and what it stands for. • I know how to create a webpage using HTML. • I can explain how information can be viewed via the Internet. • I understand what malware is. • I can explain how malware affects a network. • I can describe ways to avoid getting malware on your computer. • I can explain how computer networks allows users to communicate, share information and collaborate online giving examples of the opportunities they provide.

		<ul style="list-style-type: none"> • I know, can name and select a safe search engine e.g. Kiddle and Safe Search Kids to find information and images. • I am beginning to understand how to compare 2 websites to check for reliable information. • I can use tabs on a web browser to compare information on different web pages. • I can add websites to a favourites list • I am beginning to understand what copyright is. • I know what to do if they see or watch something that makes them feel uncomfortable. 	<ul style="list-style-type: none"> • I can start to use the advanced search functions and keywords to refine their search. • I understand the way that search results are selected and ranked. • I understand how to evaluate the reliability of information on a web page using strategies such as verification with other web pages and different information sources, looking carefully at domain names etc • I understand what copyright is and to understand what a Creative Commons License is. 	<ul style="list-style-type: none"> • I can explain how search engines work with reference to web indexing and web crawlers. • I can use the advanced search functions and keywords to refine a search. • With support, I can refine searches using Boolean operators. • I can explain the way that search results are selected and how web pages are ranked. • I can explain how to evaluate the reliability of information on a web page using known strategies. • I can use digital content within copyright law and understand the importance of acknowledging the sources of information within my work.
Crucial Learning	<p><i>Networks and Systems</i></p> <p><i>*A network is a group of interconnected computing devices.</i></p> <p><i>*A network is made up of devices, servers, switches and cables.</i></p> <p><i>* A network allows people to share information.</i></p>	<p><i>Networks and Systems</i></p> <p><i>*The internet is a giant network of computers connected to each other across the world by cables or satellite connections.</i></p> <p><i>*The internet provides many services such as communicating with people and collaborating together.</i></p>	<p><i>Networks and Systems</i></p> <p><i>*The World Wide Web (WWW) is a service provided via the internet that allows access to web pages and other shared files.</i></p> <p><i>*A search engine is a program that finds webpages on the WWW.</i></p> <p><i>*When you type a key word into a search engine, a program searches for relevant webpages and orders them according to how useful they are.</i></p> <p><i>*A web browser is a program used to view, navigate, and interact with web pages.</i></p>	<p><i>Networks and Systems</i></p> <p><i>*Search engines use algorithms to order and rank the list of webpages they return.</i></p> <p><i>*Using advance search functions alongside keywords helps to refine a search.</i></p> <p><i>*To check information on the WWW is reliable, check the source of information and compare it with a few other credible sources (online and offline).</i></p>
Knowledge	<p><u>Computer science</u></p> <p><u>Computational Thinking</u></p> <ul style="list-style-type: none"> • I understand what an algorithms is. • I know how to create algorithms for my programming projects. • I understand that programming is the process of designing and writing a set of simple instructions (a program) in a language the computer understands to achieve a set task or goal. • I can use key terminology when explaining coding. • I understand the term decompose and can decompose projects into steps to create an algorithm. • I can identify patterns in an algorithm <p><u>Coding and Programming</u></p>	<p><u>Sound (Garage band)</u></p> <p><u>Creation of Science Soundscape</u></p> <p><u>Sound</u></p> <ul style="list-style-type: none"> • I know how to edit sound effects for a purpose. • I know how to create a simple four chord song following the correct rhythm. • I know how to record a radio broadcast or audiobook. 	<p><u>Sound (Garage Band)</u></p> <p><u>To record The Eagle piece of writing.</u></p> <ul style="list-style-type: none"> • I know how to add voice over and edit sound clips (volume, pitch, fade, effect). 	<p><u>Video (iMovie) – Nature Documentary</u></p> <ul style="list-style-type: none"> • I know how to use picture in picture tools in iMovie. • I know how to create videos using a range of media - green screen, animations, film and image. • I can combine a range of multi- media within my work for a specific purpose and audience (images, audio, video).

		<ul style="list-style-type: none"> • I know how to create a program • I know how to create a sequence of Code. • I can work with a variety of inputs and outputs. • I understand coding blocks can go in any order but the computer reads the instructions and completes them in the order you give them. • I can create a sequence of commands and use a for loop to repeat the sequence. • I can use an if statement and else if block to plan for different conditions. • I can use the logical operators NOT, AND and OR to make a code more specific. • I can use a while loop to repeat a command or set of commands while a condition is true. • I can use critical thinking and problem-solving skills to identify a 'bug' in a code and to 'debug' the code to complete the task or puzzle. • I know how to evaluate my program • I can use my learning to design a prototype for an app. 			
	Crucial Learning	<p><i>Computer Science</i></p> <p><i>*An algorithm is a set of ordered steps that can be followed by a human or a computer to achieve a task or solve a problem.</i></p> <p><i>*Sequencing is the correct order in which something should happen.</i></p> <p><i>* Debugging is finding and correcting errors (bugs) in programs.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>*Green screen is an effect which allows an image or video to be superimposed in front of another image or movie.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*Green screen is an effect which allows an image or video to be superimposed in front of another image or movie.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
	Knowledge	<p><u>Presentations (Keynote) History Enquiry Presentation</u></p> <ul style="list-style-type: none"> • I can locate Keynote or PowerPoint on my iPad. • I can add text, media and sound. • I know how to create a digital mind map and include different media - sound and video. • I can save my presentation. 	<p><u>Mindmap (Numbers)</u></p> <p>Romans in Britain.</p> <p><u>Data Handling</u></p> <ul style="list-style-type: none"> • I know how to input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts. • I can format the style of table and chart. • I can sort data in a table into ascending, descending or alphabetical order. 	<p><u>Word Processing (Pages)</u></p> <p><u>Non-chronological report about a planet</u></p> <ul style="list-style-type: none"> • I can apply other useful effects to my documents such as hyperlinks. • I can add sounds to accompany and enhance the text in my document. • I know how to organise and reorganise text on screen to suit a purpose. 	<p><u>Video (iMovie) – The Holocaust</u></p> <ul style="list-style-type: none"> • I know how to use picture in picture tools in iMovie. • I know how to create videos using a range of media - green screen, animations, film and image. • I can combine a range of multi-media within my work for a specific purpose and audience (images, audio, video).

		<ul style="list-style-type: none"> • I change the format of data in a table e.g. currency, date and time etc • I can open the formula keyboard and use basic formulas to complete simple calculations such as Sum, Count, Minimum and Maximum. 		
Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>* The Numbers app is a spreadsheet used to collect, analyse and present information.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
Knowledge	<p><u>Video (Clips)</u></p> <p><u>Prehistoric jewellery Instructions</u></p> <ul style="list-style-type: none"> • I can locate and open the camera tool. • I can sequence clips of mixed media in a timeline and record a voiceover. • I know how to edit clips using the trim and cut tools. 		<p><u>Sound (Garage Band)</u></p> <p><u>To record The Malfeacance Poem.</u></p> <ul style="list-style-type: none"> • I know how to add voice over and edit sound clips (volume, pitch, fade, effect). 	<p><u>Photography and Digital Art – Show not tell activity linked to mental health</u></p> <ul style="list-style-type: none"> • I know how to edit a picture to remove items, add backgrounds, merge 2 photos together. • I know how to evaluate and discuss images explaining effects and filters that have been used to enhance the media.
Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>*The Clips app turns photos, videos and audio into engaging videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>		<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
Knowledge	<p><u>Animations (Keynote)</u></p> <p><u>Fossilisation Process</u></p> <ul style="list-style-type: none"> • I know what animation is. 			

		<ul style="list-style-type: none"> • I know how to use the drawing tool to create animations. 			
	<i>Crucial Learning</i>	<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>*Apps allow us to create and share information in an engaging way to an audience.</i> <i>*The Keynote app is a powerful presentation tool.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>			
	Knowledge	Photography and Digital Art (Keynote) <u>Egyptian Headdresses</u> <ul style="list-style-type: none"> • I know how to confidently take and manipulate photos • I know how to create a digital image using a range of tools, pens, brushes and effects • I know how to create transparent images with Instant Alpha. 			
	<i>Crucial Learning</i>	<i>*An app is a piece of software run on a device that has been programmed for a specific task.</i> <i>*Apps allow us to create and share information in an engaging way to an audience.</i> <i>*The Keynote app is a powerful presentation tool.</i> <i>* Animations are made from lots of images joined together to make it look like it is moving.</i>			
	<i>Theology and vision links</i>	<i>Children constantly review the moral dilemmas that technology can expose them to and consider how a Christian would respond. This can be done through the use of a quote from Philippians 4:8 'Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things'</i>			
Summer term	Knowledge	Word Processing and Typing (Pages) <ul style="list-style-type: none"> • I can use the caps lock for capital letters, the space bar in between words and to use touch to navigate to words or letters to edit. • I can add images alongside text in a word processed document. • I can change the font style and size. • I know how to use cut, copy and paste to quickly duplicate and organise text. 	Computer science Computational Thinking <ul style="list-style-type: none"> • I know how to write more precise algorithms for use when programming and understand that typos won't be recognised. • I know how to use simple selection and repetition in algorithms. • I know how to use logical reasoning to detect and correct errors in programs. Coding and Programming	Computer science Computational Thinking <ul style="list-style-type: none"> • I know how to solve problems by decomposing them into smaller parts. • I know how to use selection in Algorithms. • I know how to use logical reasoning to explain how a variety of algorithms work. • I know how to evaluate the effectiveness of algorithms. 	Computer Science Computational Thinking <ul style="list-style-type: none"> • I know how to decompose a design or code to focus on specific parts • I know how to use abstraction to hide complexity in my design or code • I know how to recognise and make use of patterns in my design and code • I know how to critically evaluate my work and suggest improvements. Coding and Programming

	<ul style="list-style-type: none"> • I can use some accessibility tools to help me record my ideas such as dictation. • I can copy and paste text and images to a document. 	<ul style="list-style-type: none"> • I understand what variables are • I can change the value of a variable. • I can use different variable types. • I know how to use repetition in programs. • I know how to use simple selection in programs. • I know how to work with a variety of inputs and outputs. • I know how to use logical reasoning to systematically detect and correct errors in programs. • I can use my learning to design a prototype of an app. 	Coding and Programming <ul style="list-style-type: none"> • I know how to create programs by decomposing them into smaller parts. • I know how to use a variety of selection commands in programs. • I know how to use conditions in repetition commands. • I know how to work with variables. • I know how to create programs that control or simulate physical systems. • I know how to evaluate my work, identify errors and to correct errors. • I understand why we don't wait until we've finished making a game to debug it. 	<ul style="list-style-type: none"> • I know how to use a range of sequence, selection and repetition commands to implement my design • I know how to identify the need for, and work with, variables • I know how to create procedures to hide complexity in programs • I know how to critically evaluate my work and suggest improvements. • I understand all computer programs need to be designed and understand what factors to take into consideration when designing a computer program or app.
Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i></p>	<p>Computer Science</p> <p><i>* A program is a set of ordered commands that can be run by a computer to complete a task.</i></p> <p><i>*Repetition is part of a program where commands are run multiple times in a loop.</i></p> <p><i>* Using repeat commands in computer programs makes them more efficient.</i></p>	<p>Computer Science</p> <p><i>* Selection is part of a program where if a condition is met, then a set of commands run.</i></p> <p><i>* A condition is a statement which decides whether something is true or false.</i></p> <p><i>* Programs use if, then or else conditions to help them make selections.</i></p> <p><i>*To decompose a task is to break it down into smaller, more achievable steps.</i></p>	<p>Computer Science</p> <p><i>*A variable is a piece of data (a number or text) which can be accessed and changed by a computer program.</i></p> <p><i>*A variable is made up of three parts: a name, type and value.</i></p> <p><i>* Testing helps to debug programs.</i></p>
Knowledge	<p><u>Video (iMovie)</u></p> <ul style="list-style-type: none"> • I know how to create my own movie trailer. 	<p>Word Processing and Typing</p> <ul style="list-style-type: none"> • I can combine digital images from different sources, objects, shapes and text to a piece of work. • I know how to edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. • I can use a spell check and thesaurus including through Siri and other technology. 	<p>Presentations (Keynote)</p> <p>Geography Enquiry – Biomes Model</p> <ul style="list-style-type: none"> • I can create an interactive presentation that includes a variety of media, animations, transitions and other effects. • I know how to collaborate with peers using online tools. • I know how to create an interactive guide to an image by embedding digital content. 	<p><u>Video and Animations (green screen and Clips) – The Human Circulatory System</u></p> <ul style="list-style-type: none"> • I know how to use the green screen masking tool with more than one character. • I know how to plan, script and create a 3D animation to explain a concept or tell a story. • I know how to choose and create different types of animations to best explain my learning.
Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p>

				<p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>*The Clips app turns photos, videos and audio into engaging videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
Knowledge	<p><u>Data Handling (Numbers) Plants Mindmaps/ Maths Statistics</u></p> <ul style="list-style-type: none"> • I can locate Numbers or Excel on my iPad. • I can open and create a new spreadsheet. • I know how to start to input simple data (text and numerical data) into a spreadsheet. • I can add or delete the numbers of rows or columns in a table. • I can use a chart to represent the data in my table. • I know how to create my own sorting diagram and can complete a data handling activity with text and images. 	<p><u>Sound (GarageBand) and Animations (Keynote)</u></p> <p><u>Water Cycle Animation Animations</u></p> <ul style="list-style-type: none"> • I know how to take multiple animations of a character/ process I have created and edit them together to create a longer animation. • I can start to use software to create a 3D animated story. 	<p><u>Animations (Keynote)</u></p> <p><u>Melting Process (Science/ Geography) Video (iMovie)</u></p> <p><u>Melting Process (Science/ Geography)</u></p> <ul style="list-style-type: none"> • I can use cutaway and split screen tools in iMovie. • I know how to evaluate and improve the best video tools to best explain my understanding. • I know how to further improve green screen clips using crop and resize and explore more creative ways to use the tool e.g. wearing green clothes and the masking tool. 	<p><u>Data Handling (Numbers) Statistics in Maths</u></p> <ul style="list-style-type: none"> • I know how to write spreadsheet formulas to solve more challenging maths problems. • I can start to perform more advanced calculations using functions.
Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>* The Numbers app is a spreadsheet used to collect, analyse and present information.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>*Green screen is an effect which allows an image or video to be superimposed in front of another image or movie.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p> <p><i>*Green screen is an effect which allows an image or video to be superimposed in front of another image or movie.</i></p> <p><i>* The iMovie app allows you to combine different media to create memorable videos.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>* The Numbers app is a spreadsheet used to collect, analyse and present information.</i></p>
Knowledge	<p><u>Photography and Digital Art Pointillism Nature</u></p> <ul style="list-style-type: none"> • I know how to confidently take and manipulate photos 	<p><u>Water Cycle Soundscape (Garage band)</u></p> <p>Creation of a soundscape for the water cycle. <u>Sound</u></p> <ul style="list-style-type: none"> • I know how to edit sound effects for a purpose. 	<p><u>Data Handling (Numbers) Geography traffic survey</u></p> <ul style="list-style-type: none"> • I know how to use simple formulae to solve calculations including =sum and other statistical functions 	<p><u>Word Processing and Typing and Presentations - Poetry eBook</u></p> <ul style="list-style-type: none"> • I know how to publish my documents online and discuss the audience and purpose of my content

		<ul style="list-style-type: none"> • I know how to create a digital image using a range of tools, pens, brushes and effects 	<ul style="list-style-type: none"> • I know how to create a simple four chord song following the correct rhythm. • I know how to record a radio broadcast or audiobook. 	<ul style="list-style-type: none"> • I know how to edit and format difference cells in a spreadsheet. • I can refine how data is presented in a chart using series, labels, titles, font and colours. 	<ul style="list-style-type: none"> • I know how to publish my work online.
	Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to present and communicate information in an engaging way to an audience.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The GarageBand app is a music creation tool used to bring learning to life through the addition of music and the use of podcasts.</i></p> <p><i>* The Numbers app is a spreadsheet used to collect, analyse and present information.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	<p><i>* Apps allow us to communicate information in an engaging way to an audience.</i></p> <p><i>*Multimedia is the representation of information in an interesting and engaging way through the use of a combination of text, audio, video graphics and animations.</i></p> <p><i>* To evaluate is to review the presented content to ensure it is fit for purpose and to consider ways to make improvements.</i></p> <p><i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>
	Knowledge	<p><u>Animations (Keynote)</u></p> <p><u>Plant Pollination Process</u></p> <ul style="list-style-type: none"> • I know what animation is. • I know how to use the drawing tool to create animations. 		<p><u>Word Processing (Pages)</u></p> <p><u>Letter to MP traffic/ parking/litter</u></p> <ul style="list-style-type: none"> • I can apply other useful effects to my documents such as hyperlinks. • I can add sounds to accompany and enhance the text in my document. • I know how to organise and reorganise text on screen to suit a purpose. 	
	Crucial Learning	<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>*Apps allow us to create and share information in an engaging way to an audience.</i></p> <p><i>*The Keynote app is a powerful presentation tool.</i></p>		<p><i>*An app is a piece of software run on a device that has been programmed for a specific task.</i></p> <p><i>* Apps allow us to collect, analyse and present information in an engaging way to the audience.</i></p> <p><i>*The Pages app is a powerful word processing tool that enables you to create visually engaging documents.</i></p> <p><i>* Animations are made from lots of images joined together to make it look like it is moving.</i></p>	
	Theology and vision links	<p>Children constantly review the moral dilemmas that technology can expose them to and consider how a Christian would respond. This can be done through the use of a quote from Philippians 4:8 'Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things'</p>			

Autumn		Year 3	Year 4	Year 5	Year 6
	Knowledge	Digital Literacy Self-Image and Identity <ul style="list-style-type: none"> • I can explain what is meant by the term 'identity'. • I can explain how people can represent themselves in different ways online. • I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) and why. 	Digital Literacy Self-Image and Identity <ul style="list-style-type: none"> • I can explain how my online identity can be different to my offline identity. • I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them. • I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this. 	Digital Literacy Self-Image and Identity <ul style="list-style-type: none"> • I can explain how identity online can be copied, modified or altered. • I can demonstrate how to make responsible choices about having an online identity, depending on context. 	Digital Literacy Self-Image and Identity <ul style="list-style-type: none"> • I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online. • I can describe issues online that could make anyone feel sad, worried, uncomfortable or frightened. I know and can give examples of how to get help, both on and offline. • I can explain the importance of asking until I get the help needed.
	Crucial Learning	<i>Self-Image and Identity</i> <i>*Identity explores who you are as a person.</i> <i>* People use different representations online to express identity.</i> <i>* If something makes you feel uncomfortable online, seek help.</i>	<i>Self-Image and Identity</i> <i>* People are not always who they say they are online.</i> <i>* If something makes you feel uncomfortable online, seek help.</i>	<i>Self-Image and Identity</i> <i>*Making responsible choices about our online safety keeps us safe.</i> <i>*If something makes you feel uncomfortable online, seek help.</i>	<i>Self-Image and Identity</i> <i>*Inappropriate representations are statements or images that are not suitable or appropriate.</i> <i>* If something makes you feel uncomfortable online, seek help.</i>
	Knowledge	Online Relationships <ul style="list-style-type: none"> • I can describe ways people who have similar likes and interests can get together online. • I can explain what it means to 'know someone' online and why this might be different from knowing someone offline. • I can explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online including what information and content they are trusted with. • I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried. • I can explain how someone's feelings can be hurt by what is said or written online. • I can explain the importance of giving and gaining permission before sharing things online; how the principles of sharing online is the same as sharing 	Online Relationships <ul style="list-style-type: none"> • I can describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms). • I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours. • I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs. 	Online Relationships <ul style="list-style-type: none"> • I can give examples of technology specific forms of communication (e.g. emojis, memes and GIFs). • I can explain that there are some people I communicate with online who may want to do me or my friends harm. • I can recognise that this is not my / our fault. • I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups). • I can explain how someone can get help if they are having problems and identify when to tell a trusted adult. • I can demonstrate how to support others (including those who are having difficulties) online. 	Online Relationships <ul style="list-style-type: none"> • I can explain how sharing something online may have an impact either positively or negatively. • I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not. • I can describe how things shared privately online can have unintended consequences for others. e.g. screen-grabs. • I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.

		offline e.g. sharing images and videos.			
	Crucial Learning	<i>Online Relationships</i> <i>* To trust someone means you know someone offline.</i> <i>* To keep safe online, only friend, follow and communicate with people you know in real life.</i> <i>* Permission is giving somebody the approval to do something.</i>	<i>Online Relationships</i> <i>* To show respectful behaviour online is to be positive, polite and courteous towards other people.</i>	<i>Online Relationships</i> <i>* To cause harm means to hurt someone on purpose.</i>	<i>Online Relationships</i> <i>* Digital boundaries are rules people set whilst using technology.</i> <i>* Permission must be sort before sharing content online with others.</i> <i>* Inappropriate images are pictures or videos of somebody that are not suitable e.g. nude or semi-nude images.</i>
	Knowledge	Online Reputation <ul style="list-style-type: none"> • I can explain how to search for information about others online. • I can give examples of what anyone may or may not be willing to share about themselves online. • I can explain the need to be careful before sharing anything personal. • I can explain who I can ask if unsure about putting something online. 	Online Reputation <ul style="list-style-type: none"> • I can describe how to find out information about others by searching online. • I can explain ways that some of the information about anyone online could have been created, copied or shared by others. 	Online Reputation <ul style="list-style-type: none"> • I can search for information about an individual online and summarise the information found. • I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect. 	Online Reputation <ul style="list-style-type: none"> • I can explain the ways in which anyone can develop a positive online reputation. • I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity.
	Crucial Learning	<i>Online Reputation</i> <i>* A reputation is what other people think about you.</i> <i>* The things that a person likes, shares or comments on online shape your reputation.</i> <i>* Never share personal information online.</i>	<i>Online Reputation</i> <i>* The information that someone posts online can be made up, copied or shared by others.</i>	<i>Online Reputation</i> <i>* To judge is to make a decision or to form an opinion about someone from what they see or read.</i> <i>* Judgements can be correct or incorrect.</i>	<i>Online Reputation</i> <ul style="list-style-type: none"> • A digital footprint or personality describes the activities, actions, digital contributions and communications that someone makes online. <i>* Anonymity is the act of withholding information about oneself.</i>
	Theology and vision links	Children constantly review the moral dilemmas that technology can expose them to and consider how a Christian would respond. This can be done through the use of a quote from Philippians 4:8 'Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things'			
Spring	Knowledge	Online Reputation <ul style="list-style-type: none"> • I can explain how to search for information about others online. • I can give examples of what anyone may or may not be willing to share about themselves online. • I can explain the need to be careful before sharing anything personal. • I can explain who someone can ask if they are unsure about putting something online. 	Online Reputation <ul style="list-style-type: none"> • I can describe how to find out information about others by searching online. • I can explain ways that some of the information about anyone online could have been created, copied or shared by others. 	Online Reputation <ul style="list-style-type: none"> • I can search for information about an individual online and summarise the information found. • I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect. 	Online Reputation <ul style="list-style-type: none"> • I can explain the ways in which anyone can develop a positive online reputation. • I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity.
	Crucial Learning	<i>Online Reputation</i> <i>* A reputation is what other people think about you.</i> <i>* The things that a person likes, shares or comments on online shape your reputation.</i>	<i>Online Reputation</i> <i>* The information that someone posts online can be made up, copied or shared by others.</i>	<i>Online Reputation</i> <i>* To judge is to make a decision or to form an opinion about someone from what they see or read.</i> <i>* Judgements can be correct or incorrect.</i>	<i>Online Reputation</i> <ul style="list-style-type: none"> • A digital footprint or personality describes the activities, actions, digital contributions and communications that someone makes online.

		<i>* Never share personal information online.</i>			<i>* Anonymity is the act of withholding information about oneself to protect your reputation.</i>
	Knowledge	Online Bullying <ul style="list-style-type: none"> • I can describe appropriate ways to behave towards other people online and why this is important. • I can give examples of how bullying behaviour could appear online and how someone can get support. 	Online Bullying <ul style="list-style-type: none"> • I can recognise when someone is upset, hurt or angry online. • I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation). • I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). 	Online Bullying <ul style="list-style-type: none"> • I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences. • I can describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as bullying. • I can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult. • I can identify a range of ways to report concerns and access support both in school and at home about online bullying. • I can explain how to block abusive users. • I can describe the helpline services which can help people experiencing bullying, and how to access them. 	Online Bullying <ul style="list-style-type: none"> • I can describe how to capture bullying content as evidence (e.g. screen-grab, URL, profile) to share with others who can help me. • I can explain how someone would report online bullying in different contexts.
	Crucial Learning	Online Bullying <i>*Bullying is repeated behaviour which intentionally hurts someone physically or mentally.</i>	<i>Application of crucial learning to higher level challenge/problems</i>	Online Bullying <i>*To block or report someone online is to stop all interactions with them.</i>	Online Bullying <i>* Evidence is something that is used to prove that information is true or false.</i> <i>*Online evidence may come in the form of screen grabs or screen recordings.</i>
	Knowledge	Managing Online Information <ul style="list-style-type: none"> • I can demonstrate how to use key phrases in search engines to gather accurate information online. • I can explain what autocomplete is and how to choose the best suggestion. • I can explain how the internet can be used to sell and buy things. I can explain the difference between a 'belief', an 'opinion' and a 'fact.' and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc. • I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed). • I can describe and demonstrate how we can get help from a trusted adult if we see content 	Managing Online Information <ul style="list-style-type: none"> • I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others. • I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites). • I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups) and can recognise some of these when they appear online. 	Managing Online Information <ul style="list-style-type: none"> • I can explain the benefits and limitations of using different types of search technologies e.g. voice-activation search engine. • I can explain how some technology can limit the information I am presented with e.g. voice-activated searching giving one result. • I can explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'. • I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results. • I can explain key concepts including: 	Managing Online Information <ul style="list-style-type: none"> • I can explain how search engines work and how results are selected and ranked. • I can explain how to use search technologies effectively. • I can describe how some online information can be opinion and can offer examples. • I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. • I can define the terms 'influence', 'manipulation' and 'persuasion' and

	<p>that makes us feel sad, uncomfortable worried or frightened.</p> <p><u>Health, Well-being and Lifestyle</u></p> <ul style="list-style-type: none">• I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos).• I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites).	<ul style="list-style-type: none">• I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.• I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be.• I can explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't. <p><u>Health, Well-being and Lifestyle</u></p> <ul style="list-style-type: none">• I can explain how using technology can be a distraction from other things, in both a positive and negative way.• I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.	<p>information, reviews, fact, opinion, belief, validity, reliability and evidence.</p> <ul style="list-style-type: none">• I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, pop-ups, targeted ads.• I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, influencers).• I can explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why accepting 'stereotypes' may influence how people think about others.• I can describe how fake news may affect someone's emotions and behaviour, and explain why this may be harmful.• I can explain what is meant by a 'hoax'.• I can explain why someone would need to think carefully before they share. <p><u>Health, Well-being and Lifestyle</u></p> <ul style="list-style-type: none">• I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.• I can describe some strategies, tips or advice to promote health and wellbeing with regards to technology.• I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals.• I can explain how and why some apps and games may request or take payment for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.	<p>explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news).</p> <ul style="list-style-type: none">• I understand the concept of persuasive design and how it can be used to influences peoples' choices.• I can demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important.• I can explain how companies and news providers target people with online news stories they are more likely to engage with and how to recognise this.• I can describe the difference between online misinformation and dis-information.• I can explain why information that is on a large number of sites may still be inaccurate or untrue.• I can assess how this might happen (e.g. the sharing of misinformation or disinformation).• I can identify, flag and report inappropriate content. <p><u>Health, Well-being and Lifestyle</u></p> <ul style="list-style-type: none">• I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.• I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this.• I can recognise features of persuasive design and how they are used to keep users engaged (current and future use).• I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise).
	<p><i>Managing Online Information</i> <i>* A belief is having trust or faith in something or someone.</i></p>	<p><i>Managing Online Information</i> <i>* In-app purchases are additional costs within an app.</i></p>	<p><i>Managing Online Information</i> <i>* To be sceptical means to have doubts or reservations about something.</i></p>	<p><i>Managing Online Information</i> <i>*To influence is to have an effect upon someone or something.</i></p>

Summer		<p><i>* An opinion is a judgement formed about something or someone.</i></p> <p><i>* A fact is something that is known or proven to be true.</i></p> <p><i>* Information presented on the internet is based on beliefs, opinions and facts.</i></p>	<p><i>*Pop-ups are adverts that appear when a user is browsing a webpage.</i></p> <p><i>*Fake news are stories that are made up to mislead or deceive its readers.</i></p>	<p><i>* Stereotypes are ideas or beliefs many people have about a person or thing based upon how they look on the outside.</i></p>	<p><i>* To manipulate is to intentionally persuade or convince somebody to do something.</i></p> <p><i>*To persuade is make someone do something or getting them to change their mind.</i></p> <p><i>*Persuasive design is the techniques websites use to keep the users on their platforms for longer to make money from advertisers.</i></p>
	Theology and vision links	<p>Children constantly review the moral dilemmas that technology can expose them to and consider how a Christian would respond. This can be done through the use of a quote from Philippians 4:8 'Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things'</p>			
	Knowledge	<p>Health, Well-being and Lifestyle</p> <ul style="list-style-type: none"> • I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos). • I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites). 	<p>Health, Well-being and Lifestyle</p> <ul style="list-style-type: none"> • I can explain how using technology can be a distraction from other things, in both a positive and negative way. • I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time. 	<p>Health, Well-being and Lifestyle</p> <ul style="list-style-type: none"> • I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. • I can describe some strategies, tips or advice to promote health and wellbeing with regards to technology. • I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals. • I can explain how and why some apps and games may request or take payment for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing. 	<p>Health, Well-being and Lifestyle</p> <ul style="list-style-type: none"> • I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. • I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this. • I can recognise features of persuasive design and how they are used to keep users engaged (current and future use). • I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise).
	Crucial Learning	<p><i>Managing Online Information</i></p> <p><i>* A belief is having trust or faith in something or someone.</i></p> <p><i>* An opinion is a judgement formed about something or someone.</i></p> <p><i>* A fact is something that is known or proven to be true.</i></p> <p><i>* Information presented on the internet is based on beliefs, opinions and facts.</i></p>	<p><i>Managing Online Information</i></p> <p><i>* In-app purchases are additional costs within an app.</i></p> <p><i>*Pop-ups are adverts that appear when a user is browsing a webpage.</i></p> <p><i>*Fake news are stories that are made up to mislead or deceive its readers.</i></p>	<p><i>Managing Online Information</i></p> <p><i>* To be sceptical means to have doubts or reservations about something.</i></p> <p><i>* Stereotypes are ideas or beliefs many people have about a person or thing based upon how they look on the outside.</i></p>	<p><i>Managing Online Information</i></p> <p><i>*To influence is to have an effect upon someone or something.</i></p> <p><i>* To manipulate is to intentionally persuade or convince somebody to do something.</i></p> <p><i>*To persuade is make someone do something or getting them to change their mind.</i></p> <p><i>*Persuasive design is the techniques websites use to keep the users on their platforms for longer to make money from advertisers.</i></p>

	Knowledge	Privacy and Security <ul style="list-style-type: none"> • I can describe simple strategies for creating and keeping passwords private. • I can give reasons why someone should only share information with people they choose to and can trust. • I can explain that if they are not sure or feel pressured then they should tell a trusted adult. • I can describe how connected devices can collect and share anyone's information with others. 	Privacy and Security <ul style="list-style-type: none"> • I can describe strategies for keeping personal information private, depending on context. • I can explain that internet use is never fully private and is monitored, e.g. adult supervision. • I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure. • I know what the digital age of consent is and the impact this has on online services asking for consent. 	Privacy and Security <ul style="list-style-type: none"> • I can explain what a strong password is and demonstrate how to create one. • I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. • I can explain what app permissions are and can give some examples. 	Privacy and Security <ul style="list-style-type: none"> • I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser). • I can explain what to do if a password is shared, lost or stolen. • I can describe how and why people should keep their software and apps up to date, e.g. auto updates. • I can describe simple ways to increase privacy on apps and services that provide privacy settings. • I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing). • I know that online services have terms and conditions that govern their use.
	Crucial Learning	<i>Managing Online Information</i> <i>* A belief is having trust or faith in something or someone.</i> <i>* An opinion is a judgement formed about something or someone.</i> <i>* A fact is something that is known or proven to be true.</i> <i>* Information presented on the internet is based on beliefs, opinions and facts.</i>	<i>Managing Online Information</i> <i>* In-app purchases are additional costs within an app.</i> <i>* Pop-ups are adverts that appear when a user is browsing a webpage.</i> <i>* Fake news are stories that are made up to mislead or deceive its readers.</i>	<i>Managing Online Information</i> <i>* To be sceptical means to have doubts or reservations about something.</i> <i>* Stereotypes are ideas or beliefs many people have about a person or thing based upon how they look on the outside.</i>	<i>Managing Online Information</i> <i>* To influence is to have an effect upon someone or something.</i> <i>* To manipulate is to intentionally persuade or convince somebody to do something.</i> <i>* To persuade is make someone do something or getting them to change their mind.</i> <i>* Persuasive design is the techniques websites use to keep the users on their platforms for longer to make money from advertisers.</i>
	Knowledge	Copyright and Ownership <ul style="list-style-type: none"> • I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause. 	Copyright and Ownership <ul style="list-style-type: none"> • When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it. • I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images. 	Copyright and Ownership <ul style="list-style-type: none"> • I can assess and justify when it is acceptable to use the work of others. • I can give examples of content that is permitted to be reused and know how this content can be found online. 	Copyright and Ownership <ul style="list-style-type: none"> • I can demonstrate the use of search tools to find and access online content which can be reused by others. • I can demonstrate how to make references to and acknowledge sources I have used from the internet.
	Crucial Learning	<i>Managing Online Information</i> <i>* A belief is having trust or faith in something or someone.</i> <i>* An opinion is a judgement formed about something or someone.</i>	<i>Managing Online Information</i> <i>* In-app purchases are additional costs within an app.</i> <i>* Pop-ups are adverts that appear when a user is browsing a webpage.</i>	<i>Managing Online Information</i> <i>* To be sceptical means to have doubts or reservations about something.</i>	<i>Managing Online Information</i> <i>* To influence is to have an effect upon someone or something.</i>

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