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	EYFS Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Online Safety **One lesson per half-term**	I can speak to an adult about what a content I have seen. I can talk about what I'm doing on a computer. I can say if something I find on the internet makes me feel bad. I can speak to an adult about what I have seen. I can follow the school's safer internet rules.	Know when and why to take breaks from device time. Consider the feelings of people around them, even when engaged in fun online activities. Learn why it's important to be aware and respectful of people while using devices. Learn the "Pause! Breathe! Finish Up!" routine as a self-regulation strategy for transitioning from technology to face-to-face interactions. Discover that the internet can be used to visit faraway places and learn new things. Compare how staying safe online is similar to staying safe in the real world.	Understand the importance of being safe, responsible, and respectful online. Learn the "Pause & Think Online" song to remember basic digital citizenship concepts. Recognize the different kinds of feelings they can have when using technology. Know what to do when they don't have a good feeling when using technology. Understand that being safe online is similar to staying safe in real life. Learn to identify websites and apps that are "just right" and "not right" for them. Know how to get help from an adult if they are	Understand that being a good digital citizen means being safe and responsible online. Take a pledge to be a good digital citizen. Recognise the ways in which digital devices can be distracting. Identify how they feel when others are distracted by their devices. Identify ideal device-free moments for themselves and others. Recognise the kind of information that is private. Understand that they should never give out private information online. Learn that the information they share online leaves a digital footprint or "trail". Explore what information is OK	Examine both online and in-person responsibilities. Describe the "Rings of Responsibility" as a way to think about how our behaviour affects ourselves and others. Identify examples of online responsibilities to others. Define the term "password" and describe its purpose. Understand why a strong password is important. Practise creating a memorable and strong password. Consider how posting selfies or other images will lead others to make assumptions about them. Reflect on the most important parts of their unique identities.	Learn the "What? When? How Much?" framework for describing their media choices. Use this framework and their emotional responses to evaluate how healthy different types of media choices are. Begin to develop their own definition of a healthy media balance. Identify the reasons why people share information about themselves online. Explain the difference between private and personal information. Explain why it is risky to share private information online.	Reflect on how balanced they are in their daily lives. Consider what "media balance" means and how it applies to them. Create a personalised plan for healthy and balanced media use. Define "the curiosity gap". Explain how clickbait uses the curiosity gap to get your attention. Use strategies for avoiding clickbait. Define "gender stereotypes" and describe how they can be present online. Describe how gender stereotypes can lead to unfairness or bias.

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		Explain rules for travelling safely on the internet.	unsure about a website.	to be shared online. Compare and contrast how they are connected to different people and places, in person and on the internet. Demonstrate an understanding of how people can connect on the internet. Understand what online meanness can look like and how it can make people feel. Identify ways to respond to mean words online, using "S-T-O-P". Explain how giving credit is a sign of respect for people's work. Learn how to give credit in their schoolwork for content they use from the internet.	Identify ways they can post online to best reflect who they are. Define what a community is, both in person and online. Explain how having norms helps people in a community achieve their goals. Create and pledge to adhere to shared norms for being in an online community. Understand that it's important to think about the words we use, because everyone interprets things differently. Identify ways to respond to mean words online, using S-T-O-P. Decide what kinds of statements are OK to say online and which are not. Recognise that photos and videos can be altered digitally.	Define the term "digital footprint" and identify the online activities that contribute to it. Identify ways they are -- and are not -- in control of their digital footprint. Understand what responsibilities they have for the digital footprints of themselves and others. Define "social interaction" and give an example. Describe the positives and negatives of social interaction in online games. Create an online video game cover that includes guidelines for positive social interaction. Reflect on the characteristics that make someone an upstanding digital citizen.	Create an avatar and a poem that show how gender stereotypes impact who they are. Compare and contrast different kinds of online-only friendships. Describe the benefits and risks of online-only friendships. Describe how to respond to an online-only friend if the friend asks something that makes them feel uncomfortable. Recognise similarities and differences between in-person bullying, cyberbullying and being mean. Empathise with the targets of cyberbullying. Identify strategies for dealing with cyberbullying and ways they can be an upstander for

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					Identify different reasons why someone might alter a photo or video. Analyse altered photos and videos to try to determine why.	Recognise what cyberbullying is. Show ways to be an upstander by creating a digital citizenship superhero comic strip. Define "copyright" and explain how it applies to creative work. Describe their rights and responsibilities as creators. Apply copyright principles to real-life scenarios.	those being bullied. Understand the purposes of different parts of an online news page. Identify the parts and structure of an online news article. Learn about things to watch out for when reading online news pages, such as sponsored content and advertisements.
Creating Media I **Autumn 1**	I can explore sounds generated by a device. I use a digital device to take a photograph. I can write my name using a keyboard on different devices.	I can use technology to create and present my ideas. I can use the keyboard or a word bank on my device to enter text. I can type text and use Shift for capital letters, the spacebar, the arrow keys and backspace/delete keys. I can save information in a	I can use technology to organise and present my ideas in different ways (e.g. using text, pictures, animations). I can use the keyboard on my device to add, delete and space text for others to read. I can highlight text to change its format (font size, type, colour).	I can create slideshow presentations combining images, sound and text to share my ideas and learning I can manipulate text (e.g. copy/paste, centre, embolden, underline). I used photo editing to crop and add effects to my visuals. I can combine a mixture of text,	I am confident to explore new media to extend what I can achieve. I can change the appearance of text to increase its effectiveness (e.g. centre, embolden, underline) I can create, modify and present documents for a particular purpose. I can use a keyboard confidently and make use of a spellchecker to	I can use a range of presentation applications (e.g. Movie Maker, PowerPoint, Publisher). I can review and improve my own work and support others to improve their work. I can download and use Creative Commons music and visuals and credit the authors in my work.	I can combine a range of media, recognising the contribution of each to achieve a particular outcome. I can talk about audience, atmosphere and structure when planning a particular outcome. I can confidently identify the potential of unfamiliar technology to

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	I can use the caps lock for the initial sound in my name. I can use a simple paint programme with increasing mouse control. I can understand the purpose of and experiment with hardware such as cameras, computers, ipads, voice recorders etc.	special place and retrieve it again.	I can insert /delete a word using the arrow key and delete key. I can use the shape tool to draw. I can tell you about an online tool that will help me to share my ideas with other people. I can save and open files on the device I use.	graphics and sound. I consider the audience when planning, creating or reviewing my presentation to evaluate and improve its effectiveness.	write and review my work. I can use an appropriate tool to share my work and collaborate online. I can use photo editing software to crop photographs and add effects. I can use animation in my presentation.	I can capture sound, images and video. I can use text, photo, sound and video editing tools to refine my work.	increase my creativity. I can confidently choose the correct page set up option when creating a document. I can be digitally discerning when evaluating the effectiveness of my own work and the work of others. I can confidently use text formatting tools, including heading and body text.
Handling Data **Autumn 2**	I can collect and discuss data as a class. I can insert data into a pictogram, as a class.	To label objects To describe objects in different ways To count objects with the same properties To compare groups of objects To answer questions about groups of objects	To recognise that we can count and compare objects using tally charts To recognise that objects can be represented as pictures To create a pictogram To select objects	To create questions with yes/no answers To identify the object attributes needed to collect relevant data To create a branching database To explain why it is helpful for a	To explain that data gathered over time can be used to answer questions To use a digital device to collect data automatically To explain that a data logger collects 'data	To use a form to record information To compare paper and computer-based databases To outline how grouping and then sorting data allows us to answer questions	To identify questions which can be answered using data To explain that objects can be described using data To explain that formulas can be used to produce calculated data

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	I answer simple questions relating to a pictogram.		by attribute and make comparisons To recognise that people can be described by attributes	database to be well structured To identify objects using a branching database To compare the information shown in a pictogram with a branching database	points' from sensors over time To use data collected over a long duration to find information To identify the data needed to answer questions To use collected data to answer questions	To explain that tools can be used to select specific data To explain that computer programs can be used to compare data visually To apply my knowledge of a database to ask and answer real-world questions	To apply formulas to data, including duplicating To create a spreadsheet to plan an event To choose suitable ways to present data
Programming **Spring 1 and 2**	I can make a beebot move forwards and backwards. I can use a range of control toys and devices.	I can write code to make an object move in more than one direction on the screen I can explain how I have used code to make objects move in the directions I have chosen. I can combine code to make an object move when my program starts and disappear when it is clicked on. I can combine start events and click events to create an animated scene	I can use different inputs (a mouse click, a button) to make an object hide or move in different directions I can write code to make an object change direction when a key or the pointer is pressed I can write code to make an object follow the pointer I can explain my code and say which parts of the code will execute when different keys are pressed.	I can break an open-ended problem up into smaller parts. I can put programming commands into a sequence to achieve a specific outcome. I keep testing my program and can recognise when I need to debug it. I can use repeat commands. I can describe the algorithm I will need for a simple task. I can detect a problem in an algorithm which could result in	I can write code to move an object and set its direction and speed. I can use co-ordinates in code and use negative numbers to alter the location of an object. I can use the orientation of a tablet to control an object. I can set friction to effect the speed and movement of an object. I can use a loop to do something repeatedly in a program.	I can combine sequence of instructions. I can write programs that have sequences and repetitions. I can talk about my code and identify input and output. I can use random numbers to move an object with a random angle at a random speed. I can create an app that includes random numbers, conditions and variables. I can change the heading and angle of a	I can they explain how an algorithm works. I can they check and refine a series of instructions I can write code that detects the length of a swipe /drag event and use it to set the speed of one or more object(s). I can combine my knowledge of coordinates, conditional events, random numbers and variables together to create an app

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		I can programme directions to plan a route.		unsuccessful programming.		moving object when keys are pressed. I can write code to simulate physical force (e.g. friction, gravity). I can write code to simulate a physical process (e.g. to make a ball bounce).	I can use code that combine variables together e.g. if A = 2 then B+2 and (object) appears I can use algebraic formula in my code to perform calculations which use variables. I can write code that detects the current time and create a clock app. I can they detect errors in a program and correct them.
Technology in our Lives **Summer 1**	I can name and use a keyboard and mouse with developing control. I can recognise some technology that is used in places such as home and school.	I can explain technology as something that helps us I can locate examples of technology in the classroom I can explain how these technology examples help us I can name the main parts of a computer I can switch on and log into a computer	I can identify examples of computers I can describe some uses of computers I can identify that a computer is a part of IT To identify the uses of information technology in the school To identify information	I can explain that digital devices accept inputs I can explain that digital devices produce outputs I can follow a process I can classify input and output devices I can describe a simple process I can design a digital device I can explain how I use digital devices	I can describe how networks physically connect to other networks I can describe the internet as a network of networks I can demonstrate how information is shared across the internet I can discuss why a network needs protecting I can describe networked devices	I can explain that computers can be connected together to form systems I can identify tasks that are managed by computer systems I can identify the human elements of a computer system I can explain the benefits of a	I can identify how to use a search engine I can complete a web search to find specific information ● I can refine my search ● I can compare results from different search engines I can describe how search engines select results

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	I can use technology appropriately through role play. I can recognise a range of technology that is used in places such as homes and schools. I can select and use technology for a particular purpose. I can name and use a keyboard and mouse with developing control. I can access and use simple activities using touch technology with increasing	I can use a mouse to click and drag I can use a mouse to open a program I can click and drag to make objects on a screen I can use a mouse to create a picture I can say what a keyboard is for I can type my name on a computer I can save my work to a file I can open my work from a file I can use the arrow keys to move the cursor I can delete letters I can identify rules to keep us safe and healthy when we are using technology in and beyond the home I can give examples of some of these rules I can discuss how we benefit from these rules	technology beyond school To explain how information technology helps us I can recognise common types of technology I can demonstrate how IT devices work together I can say why we use IT I can talk about different rules for using IT I can say how rules can help keep me safe I can identify the choices that I make when using IT I can use IT for different types of activities I can explain the need to use IT in different ways	for different activities I can recognise similarities between using digital devices and using non-digital tools I can suggest differences between using digital devices and using non-digital tools I can explain how a computer network can be used to share information I can explain how messages are passed through multiple connections I can discuss why we need a network switch I can demonstrate how information can be passed between devices I can explain the role of a switch, server, and wireless access point in a network I can recognise the physical components of a network	and how they connect I can explain that the internet is used to provide many services I can recognise that the World Wide Web contains websites and web pages I can explain the types of media that can be shared on the WWW I can describe where websites are stored when uploaded to the WWW I can describe how to access websites on the WWW I can explain what media can be found on websites I can recognise that I can add content to the WWW I can explain that internet services can be used to create content online I can explain that websites and their content are created by people	given computer system I can recognise how information is transferred over the internet I can explain that networked digital devices have unique addresses I can explain that data is transferred over networks in packets I can recognise that connected digital devices can allow us to access shared files stored online I can send information over the internet in different ways I can explain that the internet allows different media to be shared I can contribute to a shared project online I can suggest strategies to ensure successful group work	I can explain why we need tools to find things online I can recognise the role of web crawlers in creating an index I can relate a search term to the search engine's index I can explain how search results are ranked I can explain that search results are ordered I can explain that a search engine follows rules to rank relevant pages I can suggest some of the criteria that a search engine checks to decide on the order of results I can recognise why the order of results is important, and to whom I can describe some of the ways that search

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	control.			I can identify how devices in a network are connected together I can identify networked devices around me I can identify the benefits of computer networks	I can suggest who owns the content on websites I can explain that there are rules to protect content I can explain that not everything on the World Wide Web is true I can explain why some information I find online may not be honest, accurate, or legal I can explain why I need to think carefully before I share or reshare content	I can make thoughtful suggestions on my group's work I can compare working online with working offline I can identify different ways of working together online I can recognise that working together on the internet can be public or private I can explain how the internet enables effective collaboration	results can be influenced I can recognise some of the limitations of search engines I can explain how search engines make money I can recognise how we communicate using technology I can explain the different ways in which people communicate I can identify that there are a variety of ways of communicating over the internet I can choose methods of communication to suit particular purposes I can compare different methods of communicating on the internet I can decide when I should and should not share I can explain that communication on the internet

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							may not be private
Creating Media II **Summer 2**	I can explore sounds generated by a device. I use a digital device to take a photograph. I can write my name using a keyboard on different devices. I can use the caps lock for the initial sound in my name. I can use a simple paint programme with increasing mouse control. I can understand the purpose of and experiment	To use a computer to write To add and remove text on a computer To identify that the look of text can be changed on a computer To make careful choices when changing text To explain why I used the tools that I chose To compare writing on a computer with writing on paper. I can adapt and use my skills with a different programme and purpose.	To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing. I can adapt and use my skills with a different programme for a variety of purposes and audiences.	To explain that digital images can be changed To change the composition of an image To describe how images can be changed for different uses To make good choices when selecting different tools To recognise that not all images are real To evaluate how changes can improve an image. I can review images on a camera / tablet and delete unwanted images. I have experienced downloading images from a camera/tablet/the internet into files on the computer (e.g. using 'Save picture as…'). I can adapt and use my skills with different	To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing. I can download images from a camera / tablet / internet browser into files on the computer. I can use photos, video and sound to create an atmosphere when presenting to different audiences. I can adapt and use my skills with	To recognise video as moving pictures, which can include audio To identify digital devices that can record video To capture video using a digital device To recognise the features of an effective video To identify that video can be improved through reshooting and editing To consider the impact of the choices made when making and sharing a video. I can consider audience when editing my work and I can select, use and combine the appropriate technology tools to create effects that will have an impact on others.	To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people I can tell you why I select a particular online tool for a specific purpose. I can use the 'hanging indent' tool to help format work where appropriate (e.g. a play script.

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	with hardware such as cameras, computers, ipads, voice recorders etc.			programmes (e.g. PowerPoint, Word, Office, Movie Maker) for a variety of purposes and audiences.	different programmes and devices (e.g. ipads, Microsoft Office, photo editing). I can select which programme/device I will use depending on my purpose and audience.	I can use hyperlinks to a part of a document or to a website. I am beginning to use the skills I have already developed to create content using unfamiliar technology. I can adapt and use my skills across different programmes and devices and combine a range of tools to produce multimedia content. I have a clear understanding of purpose and audience and I take this into consideration to inform my choices of devices, programmes and register.	I can transfer my skills across different familiar or unfamiliar programmes and devices and combine ICT tools to produce multimedia content. I have a clear understanding of purpose and audience and I use technology to deliver clear messages effectively.