



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-safety	<p>Talk about everyday technology and how it is used safely.</p>	<p>Online Reputation:</p> <ul style="list-style-type: none"> • What the word 'information' means • What 'online' means • That people put information online for others to see <p>Managing Online Information:</p> <ul style="list-style-type: none"> • That people use the internet to find things out. • identify devices used to access information on the internet. • Use keywords in search engines. • Describe and demonstrate how to get help from a trusted adult or helpline if content makes them feel sad, uncomfortable, worried or frightened. 	<p>Online Reputation:</p> <ul style="list-style-type: none"> • That information shared online can stay there for a very long time • That information can be copied off the internet <p>Managing Online Information:</p> <ul style="list-style-type: none"> • Give simple examples of how to find information (e.g. search engine, voice-activation etc) • Use the internet to find things out. • Use home, forward and back buttons, links and tabs to navigate a simple webpage to get to information <p>Privacy and Security:</p> <ul style="list-style-type: none"> • Identify the features of effective passwords. • Identify the need for passwords for accounts/devices. 	<p>Online Reputation:</p> <ul style="list-style-type: none"> • That others may search their name online to find information about them • That not all information about them online may have been posted online by them <p>Managing Online Information:</p> <ul style="list-style-type: none"> • Use different search technologies. • Evaluate digital content and explain how to make choices from search results. <p>Privacy and Security:</p> <ul style="list-style-type: none"> • Recognise that passwords protect reputation and information considered important. • Suggest methods for keeping password safe and secure. • Demonstrate an awareness of the people they trust. • Make decisions about what information they share and with whom. 	<p>Online Reputation:</p> <ul style="list-style-type: none"> • That people may alter information or put untrue information about them online with or without their knowledge <p>Privacy and Security:</p> <ul style="list-style-type: none"> • Identify the risks posed by over-sharing information online. • Suggest appropriate strategies for keeping personal information private in different contexts. • Identify the risks posed by not protecting accounts and information online. • Suggest appropriate strategies for creating strong passwords and explain why these are effective. <p>Online Bullying:</p> <ul style="list-style-type: none"> • Describe what bullying behaviour is, what it might look like and where it might take place 	<p>Online Reputation:</p> <ul style="list-style-type: none"> • Use a search engine to search for information about other people and present that information for others to read • That the information found on the internet may not be accurate • That people may make judgements against others on the information that they find on the internet <p>Privacy and Security:</p> <ul style="list-style-type: none"> • Recognise and select effective strategies for managing passwords. • Suggest methods for managing situations where passwords are lost or stolen. <p>Online Bullying:</p> <ul style="list-style-type: none"> • Know that online technologies may include games, apps, social media • Describe different media you can be unkind on i.e. images, texts, videos • Describe what bullying online may 	<p>Online Reputation:</p> <ul style="list-style-type: none"> • Explain what a digital personality is. • Explain strategies anyone can use to protect their 'digital personality' and online reputation. • Explain how online anonymity can protect online reputation. <p>Privacy and Security:</p> <ul style="list-style-type: none"> • Recognise that app permissions allow access to our personal information. • Understand the relationship between the value of data and the ethics of collecting that data. • Be aware that the data we share is valuable to app developers. <p>Online Bullying:</p> <ul style="list-style-type: none"> • How to screenshot bullying behaviour • How to reach out to responsible adults with evidence of the bullying behaviour

				Online Bullying: <ul style="list-style-type: none"> • Explain how to behave kindly online and why this is important. 	<ul style="list-style-type: none"> • Know where and how to get help if they experience online bullying. 	look like on these different forms of media	
Technology in our lives	<p>Talk about and name technology from everyday experience, e.g. phone, tablet, remote control car, washing machine.</p> <p>Begin to know how our everyday technology can help/not help our health and wellbeing.</p>	<ul style="list-style-type: none"> • Explain how technology helps us • Locate examples of technology in the classroom • Name the main parts of a computer (computer, monitor, keyboard, mouse/mousepad) • Switch on and log into a computer • Use a mouse/mousepad to open a program (MS Word and Paint) • Use a mouse/mousepad to click and drag • Save and open my work to/from a file 	<ul style="list-style-type: none"> • Describe some uses of computers • Know that a computer is a part of IT • Know examples of computers • Say why we use IT • Say how rules can help keep me safe • Know the choices that I make when using IT 	<ul style="list-style-type: none"> • Explain how we use digital devices for different activities • Know that digital devices accept inputs and produce outputs • Classify input and output devices • Recognise similarities between using digital devices and non-digital tools • Explain how messages can be passed through multiple connections and devices • Explain the role of a switch, server, and wireless access point in a network • Recognise that a computer network is made up of a number of connected devices • Know the benefits of computer networks 	<ul style="list-style-type: none"> • Describe networked devices and how they connect • Discuss why a network needs protecting • Describe the internet as a network of networks • Demonstrate how information is shared across the internet • Recognise that the World Wide Web contains websites and web pages • Describe how to access websites on the WWW • Describe where websites are stored when uploaded to the WWW • Explain that internet services can be used to create content online 	<ul style="list-style-type: none"> • Make use of a web search to find specific information • Describe that a computer system features inputs, processes, and outputs • Know tasks that are managed by computer systems • Know the human elements of a computer system • Refine a web search • Recognise the role of web crawlers in creating an index • Explain that a search engine follows rules to rank results • Give examples of criteria used by search engines to rank results • Describe some of the ways that search results can be influenced 	<ul style="list-style-type: none"> • Identify that there are a variety of ways to communicate over the internet • Describe how computers use addresses to access websites • Explain that all data transferred over the internet is in packets • Recognise how to access shared files stored online • Recognise that working together on the internet can be public or private • Explain how the internet enables effective collaboration • Decide when I should and should not share information online • Explain that communication on the internet may not be private
Handling data	<p>Begin to know, group and compare objects, e.g animals, vehicles.</p>		<ul style="list-style-type: none"> • Enter data onto a computer (2investigate) • Use a computer to view data in a different format (2investigate) 		<ul style="list-style-type: none"> • Use a computer program to sort and view data in different ways (Data logger) • Know that data from sensors can be 	<ul style="list-style-type: none"> • Choose which field and value are required to answer a given question • Navigate a flat-file database to compare different views of information 	<ul style="list-style-type: none"> • Enter data and formulas into a spreadsheet • Produce and use a chart to show the answer to a question

			<ul style="list-style-type: none"> • Use a computer program to present information in different ways (2investigate) 		<ul style="list-style-type: none"> recorded (Data logger) • Choose a data set to answer a given question (Data logger) • Know data that can be gathered over time (Data logger) • Use data from a sensor to answer a given question (Data logger) • Know the intervals and best place to collect data (Data logger) • Import a data set (Data logger) 	<ul style="list-style-type: none"> • Explain what a 'field' and a 'record' is in a database • Combine grouping and sorting to answer more specific questions • Outline how 'AND' and 'OR' can be used to refine data selection • Refine a chart by selecting a particular filter • Select an appropriate chart to visually compare data 	<ul style="list-style-type: none"> • Choose and apply an appropriate format for a cell • Construct a formula in a spreadsheet • Identify that changing inputs changes outputs • Create a formula which includes a range of cells • Apply a formula to multiple cells by duplicating it
Multimedia	<p>Develop fine motor skills so they can use technology competently, safely and confidently.</p> <p>Experiment with materials, tools, colour, design, shapes, textures and how things work across a range of creative activities.</p>	<ul style="list-style-type: none"> • Use the paint, line, shape, brush size, colour and fill tools to create a picture (Paint) • Type text on a computer using letter, number and space keys (Word) • Use the backspace and delete keys to delete letters (Word) • Use the arrow keys to move the cursor (Word) • Know the toolbar and use bold, italic, and underline and change font (Word) • Type capital letters using the Caps Lock key (Word) • Select all of the text by clicking and dragging (Word) 	<ul style="list-style-type: none"> • Capture a good digital photo in portrait and landscape format • Use a tool to achieve a desired effect (Pixlr image editing software) • Recognise what devices can be used to take photographs • Explain why a picture may be unclear • Experiment with different light sources • Recognise that images can be changed (Pixlr image editing software) • Know which photos are real and which have been changed 	<ul style="list-style-type: none"> • Create an effective stop-frame animation using onion skinning (Pivot) • Manipulate a sequence of pictures to create an effective flip book animation • Review a sequence of frames to check my work • Use the shift, enter and full stop keys • Change font size and colour • Use copy and paste • Insert and resize picture 	<ul style="list-style-type: none"> • Know digital devices that can record sound and play it back • Use a device to record audio and play back sound • Know the inputs and outputs required to play audio or record sound • Plan and write the content for a podcast • Save and open a digital recording as a file • Use editing tools to arrange and edit sections of audio (Audacity) • Explain that digital recordings need to be exported to share them 	<ul style="list-style-type: none"> • Recognise that vector drawings are made using shapes • Create a vector drawing for a specific purpose • Know that each element added to a vector drawing is an object • Move, resize, and rotate objects that have been duplicated • Know how alignment grids and resize handles can be used to improve consistency • Change the order of layers in a vector drawing • Know that each added object creates a new layer in the drawing • Copy part of a drawing by 	<ul style="list-style-type: none"> • Select, change the colour of, move, rotate, resize and delete a digital 3D shape (Tinkercad) • Create digital 3D objects of an appropriate size • Group a digital 3D shape and a placeholder to create a hole in an object • Choose which 3D objects are needed to construct a model • Modify multiple 3D objects

		<ul style="list-style-type: none"> • Select a word by double-clicking (Word) • Use 'undo' to remove changes (Word) 				<ul style="list-style-type: none"> • duplicating several objects • Group to create a single object 	
Programming	<p>Develop fine motor skills so they can use technology competently, safely and confidently.</p> <p>Explore the movement of simple remote control toys, using directional language.</p> <p>Talk about what they think will happen.</p> <p>Sequence simple instructions and stories e.g. -bread making -visual timetable -basic story or information text.</p> <p>Identify and make corrections to simple sequences.</p> <p>Talk about why we have rules and what can happen if we don't follow them.</p>	<ul style="list-style-type: none"> • Compare forwards, backwards, left turn and right turn movements (Bee-bot) • Predict, match a command to an outcome and run a sequence of up to four commands on a device (Bee-bot) • Use two different programs to get to the same place (Bee-bot) • Debug a simple program (Bee-bot) • Use the start block, commands and run to move a sprite (Scratch Jr) • Use block with numbers and change the value (Scratch Jr) • Delete a sprite (Scratch Jr) 	<ul style="list-style-type: none"> • Know that a program needs to be started (Scratch Jr) • Match two sequences with the same outcome (Scratch Jr) • Predict the outcome of a sequence of commands (Scratch Jr) • Choose backgrounds and sprites for a design (Scratch Jr) • Create a program based on a design (Scratch Jr) • Build sequences of blocks to match a design (Scratch Jr) • Debug my program (Scratch Jr) 	<ul style="list-style-type: none"> • Create a program following a design with a sequence of connected commands (Scratch) • Choose a word to know an on-screen action (Scratch) • Know that the objects in a project will respond exactly to the code (Scratch) • Start a program in different ways (Scratch) • Combine sound commands (Scratch) • Implement my algorithm as code (Scratch) • Choose which keys to use for actions and explain my choices (Scratch) • Choose suitable keys to turn on additional features (Scratch) • Match a piece of code to an outcome (Scratch) • Modify a program using a design (Scratch) • Identify a way to improve a program (Scratch) • Program movement (Scratch) 	<ul style="list-style-type: none"> • Use a template to create a design for my program (Scratch) • Write an algorithm to produce a given outcome • Design a program that includes count-controlled loops • Choose which values to change in a loop and know the impact this will have • Develop my program by debugging it 	<ul style="list-style-type: none"> • Know and modify conditions in a program (Scratch) • Use selection in an infinite loop to check a condition • Create a program with different outcomes using selection • Design the flow of a program which contains 'if... then... else...' • Show that a condition can direct program flow in one of two ways • Know the outcome of user input in an algorithm • Develop and improve my program further by debugging it 	<ul style="list-style-type: none"> • Identify examples of information that is variable (Scratch) • Identify that variables can hold numbers or letters • Explain that a variable has a name and a value and that this can be changed • Decide where in a program to change a variable • Choose a name that identifies the role of a variable • Create algorithms for a project • Test the code that has been written and extend further using more variables

				<ul style="list-style-type: none">• Choose blocks to set up my program (Scratch)• Build more sequences of commands to make my design work (Scratch)• Choose suitable keys to turn on additional features (Scratch)• Identify additional features (from a given set of blocks) (Scratch)• Test a program against a given design (Scratch)			
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