



	EYFS	Years 1 and 2	Years 3 and 4	Years 5 and 6
e-safety		<ul style="list-style-type: none"> begin to give some examples of what personal information is keep a password and personal information private and explain why it is important to do this know to tell an adult when they see something unexpected or worrying online describe the things that happen online that adults must be told about begin to recognise an age appropriate website and know what to do if one is discovered create and follow sensible e-Safety rules talk about why we should go online for a short amount of time talk about why it is important to be kind and polite online and in real life know that not everyone is who they say they are on the Internet 	<ul style="list-style-type: none"> talk about what makes a secure password and why they are important protect our personal information when we do different things online use the safety features of websites as well as report concerns to an adult choose websites and games appropriate for our age make good choices about how long we spend online. ask an adult before downloading files and games from the Internet and explain why this is important talk about the ways we can protect ourselves and our friends from harm online know that anything we post online can be seen by others comment positively and respectfully online 	<ul style="list-style-type: none"> protect a password and other personal information know that anything posted online can be seen, used and may affect others explain the consequences to myself and others of not communicating kindly and respectfully explain the consequences of sharing too much about ourselves online support friends to protect themselves and make good choices online, including reporting concerns to an adult discuss the importance of choosing an age-appropriate website or game know which resources on the Internet can be downloaded and used explain the consequences of spending too much time online or on a game

Technology in our lives		<ul style="list-style-type: none"> • explain why we use technology in our homes and community • begin to understand that other people have created the information we use • identify benefits of using technology including finding information, creating and communicating • talk about the differences between the Internet and things in the physical world 	<ul style="list-style-type: none"> • save and retrieve work on a computer or tablet • talk about the parts of a computer • explain ways to communicate with others online • describe the World Wide Web as the part of the Internet that contains websites • use search tools to find and use an appropriate website • think about whether we can use images that we find online in our own work • explain whether a resource we are using is on the Internet or our own device • identify key words to use when searching safely on the World Wide Web • think about the reliability of information we read on the World Wide Web • explain how to check who owns photos, text and clipart 	<ul style="list-style-type: none"> • describe different parts of the Internet • use different online communication tools for different purposes • use a search engine to find appropriate information and check its reliability • talk about the way search results are selected and ranked • talk about copyright and acknowledge the sources of information that are found online • recognise and evaluate different types of information found on the World Wide Web • describe the different parts of a webpage • identify the Internet services I need to use for different purposes • describe how information is transported on the Internet
Programming		<ul style="list-style-type: none"> • give instructions to a friend (using forward, backward and turn) and physically follow their instructions • describe what happens when we press buttons on a robot • explain the order we need to do things to make something happen and talk about this as an algorithm • program a robot or software to do a particular task 	<ul style="list-style-type: none"> • describe the algorithm we will need for a simple task • use logical thinking to solve an open-ended problem by breaking it up into smaller parts • put programming commands into a sequence to achieve a specific outcome • use repeat commands (Y3) • use an efficient procedure to simplify a program (Y4) 	<ul style="list-style-type: none"> • decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program • refine a procedure using repeat commands to improve a program • recognise when we need to use a variable to achieve a required output • use a variable and operators to stop a program

		<ul style="list-style-type: none">• begin to predict what will happen for a short sequence of instructions• look at a friend's program and tell you what will happen• begin to use software/apps to create movement and patterns on a screen• use programming software to make objects move• use the word debug when I correct mistakes when I program• watch a program execute and spot where it goes wrong so that I can debug it	<ul style="list-style-type: none">• use a sensor to detect a change which can select an action within a program• detect a problem in an algorithm which could result in unsuccessful programming• know that we need to keep testing a program while putting it together and recognise when we need to debug it• use a variety of tools to create a program• recognise that an algorithm will help us to sequence more complex programs• recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology	<ul style="list-style-type: none">• change an input to a program to achieve a different output• use different inputs (including sensors) to control a device or onscreen action and predict what will happen• use 'if' and 'then' commands to select an action• talk about how a computer model can provide information about a physical system• use logical reasoning to detect and debug mistakes in a program• use logical thinking, imagination and creativity to extend a program• evaluate the effectiveness and efficiency of an algorithm while continually test the programming of that algorithm• use logical reasoning to detect and correct errors in algorithms and programs
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<p>Handling Data</p>		<ul style="list-style-type: none"> • talk about the different ways we use technology to collect information, including a camera, microscope or sound recorder • use technology to collect information, including photos, video and sound • make and save a chart or graph using the data we collect • talk about the data that is shown in our chart or graph • start to understand a branching database • explain what kind of information we could use to help us investigate a question 	<ul style="list-style-type: none"> • talk about the different ways data can be organised • choose the best way to present data to our friends • search a ready- made database to answer questions • add to a database • make a branching database • plan, create and search a database to answer questions • use a data logger to monitor changes and talk about the information collected • organise data in different ways • collect data and identify where it could be inaccurate 	<ul style="list-style-type: none"> • plan the process needed to investigate the world around me • use a spreadsheet and database to collect and record data • select the most effective tool to collect data for my investigation • present data in an appropriate way • interpret the data I collect • search a database using different operators to refine my search • talk about mistakes in data and suggest how it could be checked • check the data we collect for accuracy and plausibility
<p>Multimedia</p>		<ul style="list-style-type: none"> • be creative with different technology tools • use technology to organise and present my ideas in different ways • use the keyboard or a word bank on a device to enter text (Y1) • use the keyboard on a device to add, delete and space text for others to read (Y2) • save information in a special place and retrieve it again • explain how an online tool that will help us to share our ideas with other people 	<ul style="list-style-type: none"> • use photos, video and sound to create an atmosphere when presenting to different audiences • combine a mixture of text, graphics and sound to share ideas and learning • change the appearance of text to increase its effectiveness • use a keyboard confidently and make use of a spellchecker to write and review our work • create, modify and present documents for a particular purpose 	<ul style="list-style-type: none"> • use text, photo, sound and video editing tools to refine work • talk about audience, atmosphere and structure when planning a particular outcome • select, use and combine the appropriate technology tools to create effects that will have an impact on others. • explain why particular online tools are selected for a specific purpose • review and improve our own work and support others to improve their work

		<ul style="list-style-type: none">• save and open files on the devices we use	<ul style="list-style-type: none">• use an appropriate tool to share work and collaborate online	
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