Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-Safety	I am beginning to understand what keeps me healthy.	I know how to use the internet and electronic devices but understand that a healthy lifestyle includes physical activity and getting enough sleep and I should not spend too much time on electronic devices.		I know the positive and negative impact of using the internet and electronic devices on a healthy lifestyle and am beginning to understand safe user habits.		I know that for most people the internet is an integral part of life and has many benefits but I understand the importance of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing	
	I can follow instructions to stay safe online.	I understand how to use internet safety rules such as SMART when I am online.		I understand and use internet safety rules (SMART) when I am online and I know how my behaviour online can affect others.		I know how to consider the effect of my online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private	
	I know a simple rhyme to stay safe online.	I know how to use the internet safely and understand that some games and social media are age restricted to keep me safe.		I know why social media, some computer games and online gaming are age restricted.		I know that the internet can be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health.	
	I am beginning to know how to use the internet safely and to stay on the sites my teachers tell me.	I know how to use the internet safely and to stay on the sites my teachers tell me.		I understand that not everything I read on the internet is correct and that information can sometimes be misleading.		I know how to be a discerning consumer of information, including that from search engines is ranked, selected and targeted	

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	I know I should tell a trusted adult if I see anything on the internet that makes me feel frightened, uncomfortable or unsafe.	I know I should tell a trusted adult if I see anything on the internet that makes me feel frightened, uncomfortable or unsafe.		I see anything on the internet that makes me feel frightened, uncomfortable or unsafe I know who to tell and I am beginning to know where I can report concerns.		I know where and how to report concerns and get support with issues online	

Programming							
	I follow instructions from teachers.	I give instructions to my friend and follow instructions to move around.	I give instructions to my friend (using forward, backward and turn) and physically follow their instructions.	I break up open-ended problem up into smaller parts.	I use logical thinking to solve an open-ended problem by breaking it up into smaller parts.	I decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program.	I deconstruct a problem into smaller steps, recognising similarities to solutions used before.
	I play with simple apps and robots	I can press buttons in the correct order.	I programme a robot or software to do a particular task.	I can put programme commands into a sequence to achieve a specific outcome.	I use an efficient procedure to simplify a programme.	I can refine a procedure using repeat commands to improve a program.	I can evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm.
	I sequence simple actions in order.	I can describe what actions are needed to make something happen.	I look at my friend's programme and tell you what will happen.	I keep testing my programme and can recognise when I need to debug it.	I know that I need to keep testing my programme while I am putting it together.	I can change an input to a program to achieve a different output.	I use a variable and operators to stop a program.
	I can use simple programme apps on the ipad.	I can begin to use software to create movement on a screen.	I use programming software to make objects move.	I can use repeat commands.	I can use a variety of tools and method to create a programme.	I can use a variable to increase programming possibilities.	I recognise when I need to use a variable to achieve a required output.
	I am beginning to understand sequences.	I am beginning to use the word algorithm.	I can tell you the order I need to do things to make something happen and talk about this as an algorithm.	I describe the algorithm I will need for a simple task.	I recognise that an algorithm will help me sequence more complex programmes.	I use logical thinking, imagination and creativity to extend a program.	I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen.
	I identify mistakes when following instructions.	I am beginning to use the word debug.	I can watch a programme execute and spot where it goes wrong so that I can debug it.	I can detect a problem in a programme.	I can recognise an error in a programme and debug it.	I use logical reasoning to detect and debug mistakes in a program.	I can use logical reasoning to detect and correct errors in algorithms and programs.

Handling Data	I physically group items that are different.	I talk about the different ways in which information can be shown.	I talk about different ways I use technology e.g. photo, video, sound recorder.	I can talk about the different ways data can be organised.	I collect data and identify where it could be inaccurate.	I can use a spreadsheet and database to collect and record data.	I can select the most effective tool to collect data for my investigation.
	I take photos and videos.	I use different ways to collect information e.g. photos, video and sound.	I can make and save a simple chart or graph using the data I collect.	I search a ready-made database to answer questions.	I can organise data in different ways and identify where it could be inaccurate.	I talk about mistakes in data and suggest how it could be checked.	I explain mistakes in data and explain how these can be checked.
	I group things together with support.	I can sort different kinds of information and present it to others	I am starting to understand a simple database	I can add to a database.	I plan, create and search a database to answer questions.	I can search a database using different operators to refine my search.	I use the skills I have developed to interrogate a database
	I talk about similar things in a group.	I can add information to a pictography and talk about what I have found.	I talk about data that is shown in a graph or chart.	I can collect data to help me answer a question	I can choose the best way to present data to my friends	I can present data in an appropriate way	I interpret the data I collect. I present the data I collect in an appropriate way

Technology and Multimedia	I use apps to be creative.	I can be creative with different technology tools.	I can use technology to organise and present my ideas in different ways.	I can combine a mixture of text, graphics and photos to share my ideas and learning.	I create, modify and present documents for a particular purpose.	I use text, photo, sound and video editing tools to refine my work for a particular purpose.	I combine a range of media, recognising the contribution of each to achieve a particular outcome.
	I can begin to use a keyboard to record ideas.	I can use the keyboard or a word bank on my device to enter text	I can use the keyboard on my device to add, delete and space text for others to read.	I can use appropriate keyboard commands to amend text on my device, including making use of a spell checker.	I use a keyboard confidently and make use of a spellchecker to write and review my work	I review and improve my work and support others to improve their work.	I am digitally discerning when evaluating my work and the work of others.

	I know that information can be saved.	I save information in a special place and retrieve it again	I save and open files on the device I use.	I use an appropriate tool to share online.	I use an appropriate tool to share and edit work online.	I can select an appropriate online or offline tool to create and share ideas.	I can tell you why I select a particular online tool for a specific purpose.
	I know that different technology has different purposes.	I begin to identify some of the benefits of using technology.	I can identify benefits of using technology including finding information, creating and communicating.	I know ways to communicate with others online.	I understand how to communicate with others safely online.	I use different online communication tools for different purposes.	I select an appropriate tool to communicate and collaborate online.
	I find information with support.	I can use links to websites to find information.	I am starting to understand that other people have created the information I use.	I can use search tools to find and use an appropriate website.	I identify key words to use when searching safely on the World Wide Web.	I use a search engine to find appropriate information and check its reliability.	I talk about the way search results are selected and ranked and I check the reliability of a website.
	I know I can use a computer to get on the internet.	I know what the internet is. I know I can get on the internet using a range of devices. E.g. laptop/ phone.	I talk about the differences between the internet and the physical world.	I describe the World Wide Web as the part of the internet that contains websites.	I tell you whether a resource I am using is on the internet, the school network or my own device.	I recognise and evaluate different types of information I find on the World Wide Web.	I know about copyright and acknowledge the sources of information that I find online.
	I can look at photos and videos and recognise they have been taken using technology.	I can use technology to take a photo or short film.	I can use technology to change and edit a photo or short films.	I can capture a video for a purpose and choose which clips I want to keep or discard	I can capture a video for a purpose and trim and arrange clips to convey meaning.	I can storyboard and capture videos for a purpose and plan for transitions and add effects.	I can storyboard and capture videos I can trim, arrange and edit audio levels within clips and export my video.

Computing and communication	I can play on age appropriate websites	I can talk about websites I have been on	I can explore websites by using arrows, menus and hyperlinks.	I can navigate to websites using search engines.	I can navigate to websites using key words within a search engine.	I can use advanced search functions to find websites	I can use advanced search features to find websites and understand that certain websites might not be reliable sources of information.
	I know you can send emails online.	I can recognise an email address and find the @ key on the keyboard.	I can contribute towards an email and open and select an email within an inbox.	I can log on to an email account and reply to sent emails.	I can attach files to an email and download safe files from an email.	I can use emails to communicate safely with friends and family independently.	With permission, I can register for a blog and create my own page embedding photos, hyperlinks and videos.