

Year	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
EYFS	Online safety - many of the key online safety messages will be conveyed through guided use, continuous provision and adult modelling in the school or setting. Additionally, and importantly, this will be alongside and with the involvement of parents and carers at home. We will listen to young children talking about their online world and use this talk to engage with them and find out more about their practice and behaviour. In EYFS, continuous provision draws on common uses of control technology for children to experience first-hand and to explore their uses through play. They will use multimedia equipment, including cameras and iPads to capture still and moving images. With help, they will play back their captured recordings, demonstrating confidence and increasing control. They will be encouraged to explore ways of making and listening to sounds using simple programs, apps and devices. Children will explore the technology they encounter at home and school (e.g. role play toys, photocopiers, iPads etc.) and how technology has changed over time. More details of the EYFS curriculum to follow.											
1	IMPLICATIONS How I use Technology [1] WE ARE INTERNET USERS Using the Internet safely, responsibly & respectfully		FOUNDATIONS [2] WE ARE CODERS Using programmable toys		APPLICATIONS [3] WE ARE EDITORS Typing and changing text		APPLICATIONS [4] WE ARE ARTISTS Creating digital artwork		FOUNDATIONS [5] WE ARE PRESENTERS Filming the steps of a recipe		APPLICATIONS [6] WE ARE PHOTOGRAPHERS Creating a digital self-portrait	
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	In Year 1, pupils learn about some of the potential dangers in the online world and what basic steps we all need to take in order to have positive digital experiences. They learn the SMART rules and look at what information should be kept safe when using the Internet. They explore the positives and potential negatives of online communication and begin to develop the skills to recognise potential dangers and act accordingly to keep themselves and others safe.	Recall some of the SMART rules for Internet safety. Know who to tell if someone online asks for personal information. Make links between the online and offline world.	In this unit, pupils understand algorithms as a simple set of instructions, and learn that algorithms can be used to give instructions to a digital device. They have practical experience of giving simple instructions to control a digital device to solve a problem. If things do not go as expected they are taught to use a 'trial and error' approach to fix problems. Pupils will also begin to develop logical reasoning through making simple predictions.	Use directional language to navigate a person or object. Develop and record sequences of instructions as an algorithm. Program a toy to follow an algorithm. Try a different solution when something doesn't happen as expected. Make verbal predictions about what will, or has, happened.	In this unit, pupils learn to use a software program to create a simple poster that combines a picture background with text. They will make some changes to their work and talk about their choices. With guidance, they will learn to save their work and understand that doing this makes it available to work on in the future.	Develop basic keyboard and keypad skills, through typing and formatting text. Make simple edits to text, including changing a font colour, size and style. Develop skills in combining text and images. With guidance, save their work with a meaningful name.	In this unit, pupils will learn how to open a browser and use a search engine to search for pictures. They will use their research to gather ideas for a digital art composition which they will go on to create using a basic graphics package.	Develop basic keyboard and keypad skills, through typing and formatting pictures. Use agreed keywords to search for pictures. Combine picture objects to make a composition. With guidance, save their work with a meaningful name.	In this unit, pupils produce short videos of themselves making a healthy meal or snack. They also decompose a complex problem into smaller parts – an important idea from computer science. Use a video camera to capture moving images. Create simple digital content using video. Develop basic collaboration skills.	In this unit, pupils will consolidate or further their 'applications' skills by creating a digital self-portrait. They will use a built-in webcam to take a picture of themselves and then (with help) load it into a basic graphics package to edit and enhance it with text and graphics. Take a photograph of themselves using a webcam (such as that on a Chromebook or tablet). Create simple digital content using some combination of text, paint and photographic tools. Make some changes to a piece of digital work. Create and save new files within a personal network location. With guidance, save their work with a meaningful name.		
	CURRICULUM -LINK: PSHE				CURRICULUM -LINK: MATHS (Geometry - position and direction)		CURRICULUM -LINK:		CURRICULUM -LINK: DESIGN & TECHNOLOGY		CURRICULUM -LINK: ART & DESIGN	
2	IMPLICATIONS [7] WE ARE INTERNET USERS Using the Internet safely, responsibly & respectfully		FOUNDATIONS [8] WE ARE CODERS Creating on-screen programs 1		APPLICATIONS [9] WE ARE COLLECTORS Collecting and presenting data		APPLICATIONS [10] WE ARE RESEARCHERS Researching and presenting a topic		FOUNDATIONS [11] WE ARE CODERS Creating on-screen programs 2		APPLICATIONS [12] WE ARE ANIMATORS Making an animation	
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	In Year 2, pupils learn about how what they do online leaves a trail called a digital footprint. They look at how to improve the efficiency of their online searches, the types of websites that are best for children to access when looking for information, as well as how to identify inappropriate content and the actions they should take if they do. Children will be introduced to the term 'cyberbullying' and look at how they should communicate online and deal with instances of people being unkind via digital means.	Know that a digital footprint contains information about a person. Begin to identify possible dangers online Know what to do if a website makes them uncomfortable. Identify unkind online behaviour and know what to do if they think someone is being unkind to them online.	In this unit, pupils learn how algorithms are implemented as programs on-screen, and make links with their previous experience of programming floor robots. They create their own simple on-screen algorithms using a sequence of commands in a turtle program. They build on their logical reasoning skills by making predictions and testing their code for expected outcomes. When outcomes are not as expected they make changes to their algorithms to try and correct them.	Begin to plan algorithms by first recording them on paper. Convert simple algorithms to screen-based programs. Predict what a simple program will do. Spot and fix (debug) errors in programs.	In this unit, pupils learn the advantages of collecting information in an organised way. They learn that information can be presented as digital content in a variety of ways for different purposes, and gain practical experience of this. They work together to develop collaboration skills and begin to critically evaluate the merits of different data presentations.	Collect data using simple methods such as tick charts or tally charts. Use simple charting software to produce pictograms and other basic charts. Use a branching database to sort and classify a group of items by answering questions. Retrieve previously saved files from a personal network location. Begin to think independently about using meaningful names when saving digital files.	In this unit, pupils research a topic – safely, effectively and efficiently – using a structured approach (mind mapping). They share their findings with others through a short multimedia presentation. Further develop skills in combining text and graphics and manipulating them for purpose. Create and deliver a short multimedia presentation. Collaborate with peers by working as part of a group.	Suggest some keywords to use when searching for information on the internet. Record information as notes through the use of mind mapping. Convert information as notes through the use of mind mapping. Predict what a simple program will do. Spot and fix (debug) errors in programs.	In this unit, pupils are given the chance to consolidate, or further, their understanding of how algorithms are implemented as programs on digital devices. They create simple algorithms for a block programming language and further hone their logical reasoning skills through debugging and predicting outcomes. Convert simple algorithms to screen-based programs. Predict what a simple program will do. Spot and fix (debug) errors in programs.	In this unit, pupils are introduced to the concept of animation. They will look at different examples of cartoon and stop motion animation techniques and then use a basic software program to create a simple animation of their own. They will learn to plan a piece of sequential work using a story map format. Plan a short sequence of events using a story map. Create frames for each event using a simple software package. Begin to combine different media (such as graphics, text and sound) for effect. Make simple edits to correct and improve work.		
	CURRICULUM -LINK: PSHE				CURRICULUM -LINK: MATHS		CURRICULUM -LINK: HISTORY					

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3	IMPLICATIONS [13]		FOUNDATIONS [14]		APPLICATIONS [15]		USING TECHNOLOGY - Implications [16]		FOUNDATIONS [17]		APPLICATIONS [18]	
	WE ARE INTERNET USERS Using the Internet safely, responsibly & respectfully		WE ARE CODERS Programming an animation		WE ARE OPINION POLLSTERS Collecting and analysing data		WE ARE TECHNICIANS Exploring computer networks		WE ARE CODERS Finding and correcting bugs in programs		WE ARE DIRECTORS Videoing performance	
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	In Year 3, pupils begin to develop their knowledge of what it means to have an online reputation. They learn about the reliability and truth of information online and look at some ways to protect themselves and their reputation. They also learn about ways in which they can be kind to others online.	Begin to demonstrate ways of protecting their online reputation. Begin to identify ways of working out whether information online is reliable. Begin to identify ways in which they can secure their information online by creating strong passwords. Begin to identify what they can do to be kind online.	In this unit, pupils plan and create an animated cartoon using characters they design using a paint tool. They plan their animation using a simple storyboard and then create it by translating the storyboard into a series of sequential instructions (program) for graphic objects. They will begin to use selection within their code to offer alternative outcomes. They will begin to recognise that instructions to a computer must be precise and unambiguous through testing and debugging during the process.	Plan an animation in sequential steps using a storyboard. Apply selection and logical reasoning to solve a problem. Write a program in a block programming language to create the animation. Correct mistakes in their animation programs (debugging).	In this unit, the children create their own opinion poll, seek responses, and then analyse the results. Identify some elements of survey design. Identify some ethical and legal aspects of online data collection. Use software tools to facilitate data collection. Gain skills in using charts to analyse data. Gain skills in interpreting results.	Identify some elements of survey design. Identify some ethical and legal aspects of online data collection. Use software tools to facilitate data collection. Gain skills in using charts to analyse data. Gain skills in interpreting results.	In this unit, pupils use some unplugged activities to develop their understanding of networks and key communication protocols (including email). They discuss the benefits and possible dangers of communicating information online and then use a simple messaging service to demonstrate good practice. They conclude by collaborating on a podcast discussing the different types of online communication they have learnt about.	Demonstrate simulation of a simple 'packet' system. Illustrate the basic client-server model on which most networks are based. Name some different internet communication protocols and be able to discuss some similarities and differences between them. Begin to use digital media and technology to create content for meaningful purpose.	In this unit, children learn to recognise some common types of programming error, and practise solving problems through logical thinking. Using their knowledge of sequencing and selection, they look at some block code and make predictions about what the different outcomes of executing the code will be. They then run the code to test their predictions before going on to debug the code and create working versions of the programs.	Demonstrate logical choices and prediction when using a computer program. Debug a simple algorithm to ensure the specific goal is achieved. Name and recognise a number of common types of bug in software. Build up resilience and strategies for problem solving.	This unit gives pupils a chance to direct a short narrated video of someone practising a sport or other skill. They will understand the qualities of effective video, such as the importance of narrative, consistency, perspective and scene length.	Plan and rehearse for a video shoot. Frame shots when shooting live video. Use software tools to review and edit video, including adding narration and (optional) effects. Collaborating with others to achieve the same goals.
	CURRICULUM -LINK: PSHE				CURRICULUM -LINK: MATHS, BRITISH VALUES						CURRICULUM -LINK: PE	
4	IMPLICATIONS [19]		FOUNDATIONS [20]		APPLICATIONS [21]		APPLICATIONS [22]		FOUNDATIONS [23]		APPLICATIONS [24]	
	WE ARE INTERNET USERS Using the Internet safely, responsibly & respectfully		WE ARE CODERS Making an adventure game		WE ARE MUSICIANS Creating digital music		WE ARE HTML EDITORS Making web content with HTML		WE ARE PRODUCT DESIGNERS Prototyping an interactive toy		WE ARE METEOROLOGISTS Researching & presenting the weather	
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	In Year 4, pupils continue to develop their knowledge of what it means to have an online reputation. They learn about the reliability and truth of information online and look at some ways to protect themselves and their reputation. They also learn about ways in which they can be kind to others online.	Demonstrate ways of protecting their online reputation. Identify ways of working out whether information online is reliable. Identify ways in which they can secure their information online by creating strong passwords. Identify what they can do to be kind online.	In this unit, children design and create an interactive adventure game using a block programming language. They learn how to use a flowchart to plan for different sequences of events and continue to develop their programming knowledge by translating user-based choices into selection statements.	Create a plan that demonstrates multiple sequences of events. Write code that can accept typed user input. Store and retrieve data using variables. Use selection statements to provide different outcomes. Test and debug the code.	In this unit, pupils are introduced to digital music. They use software tools to explore different musical concepts including rhythm, tempo, melody and pitch. They then create a composition designed to create a mood for a film soundtrack.	Use one or more programs to edit music. Create and develop a musical composition, refining ideas through reflection and discussion. Discuss how the composition can enhance work in other media.	In this unit, pupils learn about the history of the web, before studying HTML (hypertext mark-up language), the language in which web pages are written. They learn to edit and write HTML, and then use this knowledge to create content for a simple web page.	Understand some technical aspects of how the internet makes the web possible. Use HTML tags for mark up of text and (optional) style elements and images. Use hyperlinks to connect ideas and sources. Use HTML to create a simple web page with meaningful content.	In this unit, the children work together to design a simple toy that incorporates sensors and outputs and then create an on-screen prototype of their toy using a block programming language.	Design and make an on-screen prototype of a computer-controlled toy Recognise when to use different forms of input and output (such as sensors, switches, motors, lights and speakers) Write code to simulate how the toy works. Test and debug the code.	This unit brings together data measurement, analysis and presentation. Pupils learn about different measurement techniques for weather, both analogue and digital, and look at how to record and present the data in different ways. They learn how to collaborate on a multimedia presentation as they create a weather report.	Use computer-based tools to record weather data. Use a spreadsheet to create charts. Analyse data, explore inconsistencies in data and make predictions. Combine media using presentation software.
	CURRICULUM -LINK: RSE, PSHE		CURRICULUM -LINK: ENGLISH		CURRICULUM -LINK: MUSIC		CURRICULUM -LINK: ENGLISH		CURRICULUM -LINK: DESIGN & TECHNOLOGY		CURRICULUM -LINK: GEOGRAPHY	

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[1] ONLINE SAFETY is recorded here as one block but is actually taught as 6 lessons in 2 week blocks (1 block per term) over the course of the year.

[2] Taught as an 8-10 week block.

[3] Taught as a 4-5 week block.

[4] Taught as a 4-5 week block.

[5] Taught as an 5-6 week block.

[6] Taught as a 5-6 week block.

[7] ONLINE SAFETY is recorded here as one block but is actually taught as 6 lessons in 2 week blocks (1 block per term) over the course of the year.

[8] Taught as an 8-10 week block.

[9] Taught as a 4-5 week block.

[10] Taught as a 4-5 week block.

[11] Taught as an 5-6 week block.

[12] Taught as a 5-6 week block.

[13] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).

[14] Taught as an 8-10 week block.

[15] Taught as a 4-5 week block.

[16] Taught as a 4-5 week block.

[17] Taught as an 5-6 week block.

[18] Taught as a 5-6 week block.

[19] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).

[20] Taught as an 8-10 week block.

[21] Taught as a 4-5 week block.

[22] Taught as a 4-5 week block.

[23] Taught as an 5-6 week block.

[24] Taught as a 5-6 week block.

[25] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).

[26] Taught as an 8-10 week block.

[27] Taught as a 4-5 week block.

[28] Taught as a 4-5 week block.

[29] Taught as an 5-6 week block.

[30] Taught as a 5-6 week block.

[31] ONLINE SAFETY is recorded here as one block but is actually taught as 8 lessons in 2 week blocks (2 blocks in autumn and 1 block each in spring and summer).

[32] Taught as an 4-5 week block.

[33] Taught as an 4-5 week block.

[34] Taught as a 5-6 week block.

[35] Taught as a 5-6 week block.