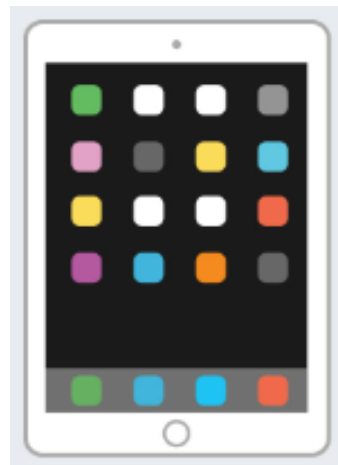






Swindon Village Primary School



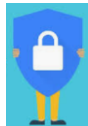




Computing Curriculum








Swindon Village Primary School Computing Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	What is technology? 		Selecting & identifying technology 		Explorers - Coding with Beebots and Code-a-pillar 	
Year 1	Online Safety 	Computing Skills Word Processing 	Coding - Beebots / Code-a-Pillar 		Computing Skills Presenting Information 	Creation Stop Motion Animation 
Year 2	Online Safety 	Computing Skills Presentations 	Coding - Scratch Jr 		Computing Skills Online Research 	Creation Video Diary 
Year 3	Online Safety 	Computing Skills Word Processing 	Coding - How to Use Scratch 		Computing Skills Book Creator 	Creation Comic Creation 
Year 4	Online Safety 	Computing Skills Organisation 	Coding - Advanced Scratch 		Computing Skills Presenting Information 	Creation Stop Motion Animation 
Year 5	Online Safety 	Computing Skills Internet Surfing 	Coding - Swift Playgrounds 		Computing Skills Data Handling 	Robotics 
Year 6	Online Safety 	Computing Skills Internet Surfing 	Robotics Coding - Sphero 		Creation Movie Making 	






Year 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview Year 1	Online Safety 	Computing Skills Word Processing 	Coding 	Creation Presenting Information 	Creation Stop Motion animation 	
Suggested content and progression	<p>Pupils will discuss and identify some dangers of the internet. They will define what cyberbullying is and how they can overcome/block it.</p> <p><i>Know what cyberbullying is.</i></p> <p><i>Know how to act online.</i></p> <p><i>Understand the signs of a trustworthy website.</i></p> <p><i>Know how to block out online bullying.</i></p> <p><u>Possible outcome:</u> as a class, create a video that helps others stay safe online.</p>	<p>Pupils will explore and improve fluency in word processing. They will also be able to move the cursor to a desired location.</p> <p><i>Know how to type your name using capital letters.</i></p> <p><i>Know how to type the alphabet.</i></p> <p><i>Know how to use the space bar, return key, back space.</i></p> <p><i>Know how to save a document.</i></p> <p><u>Possible outcome:</u> Type a sentence on your topic and save.</p>	<p>Pupils will be able to develop and explore a range of coding skills. Using beebots, they will navigate these devices in a variety of contexts.</p> <p><i>Understand what algorithms are.</i></p> <p><i>Know where some algorithms are used in our lives.</i></p> <p><i>Explore the possible actions of Beebots.</i></p> <p><i>Create algorithms for a specific outcome.</i></p> <p><u>Possible outcomes:</u> Create instructions on how to follow a path with a Beebot.</p> <p><i>Fill in the algorithm to guide a Code-a-pillar to the star (worksheet challenge)</i></p>	<p>Pupils will apply their understanding of word processing to create a sentence on word. They will deepen their knowledge by using a capital letter and a full stop.</p> <p><i>Explore the keyboard.</i></p> <p><i>Write words in upper case and lower case.</i></p> <p><i>Introduce the full stop.</i></p> <p><i>Draft short sentences on a specific subject.</i></p> <p><i>Write a sentence on word document.</i></p> <p><u>Possible outcome:</u> Publish a piece of work.</p>	<p><i>Pupils will photograph characters to create a movie.</i></p> <p><i>Plan a short movie scene.</i></p> <p><i>Use small movements to create smooth animation.</i></p> <p><i>Add a title using capital letters appropriately</i></p> <p><u>Possible outcome:</u> Use physical characters to make a short movie</p>	
	Key vocabulary	Cyberbullying, trustworthy, website, report, block, tell, dangers and positives.	keys, letters, space bar, back space, return.	Beebot, algorithm, instructions, navigate, steps, coding, debug, turn.	Shift, upper case, lower case, full stop, symbol, type, key, document.	Photo, movie, animation, stop motion.
Required resources	iPads, ChildNet, iLearn2	iPads, iLearn2	iPads, iLearn2, Barefoot Computing, Beebots, Mazes, Beebot app, Code-a-pillar app.	iPads, iLearn2	Ipads, Lego Movie Creator app, Lego/toys/modelling clay.	


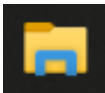



Year 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview Year 2	Online Safety 	Computing Skills Presentations 	Coding 	Computing Skills Online Research 	Creation Video Diary 	
Suggested content and progression	<p>Pupils to discuss and develop their understanding of how we are online citizens. They will help others to understand the dangers of the internet and how we can conduct ourselves whilst on it.</p> <p>Know what the internet is.</p> <p>Understand some advantages and disadvantages of the internet.</p> <p>Know what the term cyberbullying means</p> <p>Understand how to safe online.</p> <p><u>Possible outcome:</u> in groups, create a poster and speech regarding safety online.</p>	<p>Pupils to develop skills in using technology to present information.</p> <p>Understand the purpose of a presentation.</p> <p>Type and create slides for a presentation.</p> <p>Know how to change text size, font and font colour.</p> <p><u>Possible outcome:</u> Create and present presentation on your topic.</p>	<p>Pupils will discuss and understand what debugging is and how it affects codes.</p> <p>Identify an algorithm and know what debugging is.</p> <p>Debug algorithms in real life situations - using written or verbal instructions.</p> <p>Debug a range of online algorithms.</p> <p>Predict the outcome of different algorithms.</p> <p>Learn to create code using blocks in ScratchJr (movement, change size, turn, green flag)</p> <p><u>Possible outcome:</u> Rearrange instructions into correct algorithm.</p>	<p>Pupils become further aware of the ability to source information on the internet and consider the safety and reliability aspects of this.</p> <p>Understand the terminology associated with searching</p> <p>Gain a better understanding of searching online</p> <p>Refine searches for reliability of information</p> <p>Understand the concept of digital footprint</p> <p><u>Possible outcome:</u> in class, debate the best source of information - books or the web?</p>	<p>Pupils discuss how to present information. They will understand the benefits of formal/informal presentation.</p> <p>Categorise which ways of online presenting are formal/informal</p> <p>Discuss possible career pathways</p> <p>Discuss the drawbacks of online presenting (compare to podcasting)</p> <p><u>Possible outcome:</u> create a week of video diaries for school blog/twitter.</p> <p>Present Sports Day/class story/school event formally or informally.</p>	
Key vocabulary	Cyberbullying, trustworthy, website, report, block, tell, dangers, respect and positives.	Presentation, slides, transition, text, font, size, software, program.	Algorithm, coding, debugging, decompose, troubleshoot, online, unplugged.	Internet, World Wide Web, surfing, reliability, refine, advanced search, search engines, sources, website	Formal, informal, presenting, video, benefits, audio, visual, identity, diary, YouTube, appropriate.	
Required resources	iPads, childNet, thinkuknow, iLearn2.	iPads	ScratchJr, Code-a-Pillar, Beebot app, iPads, barefoot computing, iLearn2	iPads, iLearn2	iPads, headphones	






Year 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview Year 3	Online Safety 	Computing Skills Word Processing 	Coding 		Computing Skills Book creator 	Creation Comic Creation 
Suggested content and progression	<p>Pupils will recognise how they are responsible for their actions online as much as they are face-to-face. They will learn the importance of passwords and the growing relevance of social media.</p> <p>Understand how to be respectful online and about your online identity.</p> <p>Know the importance of creating powerful passwords.</p> <p>Understand what cyberbullying is, how to prevent it and what to do if it occurs.</p> <p>Know what social media is and the advantages and disadvantages.</p> <p><u>Possible outcome:</u> create a video for thinkuknow for a specific aspect of this term's online safety.</p>	<p>Pupils will apply prior skills to creating content with a specific program.</p> <p>Revise the functions of changing fonts (choosing a design to fit the task).</p> <p>Implementing visuals - Borders, Word Art and images from the internet.</p> <p>Saving and opening documents from specific files.</p> <p><u>Possible outcome:</u> create a Christmas card.</p>	<p>Pupils will examine a variety of coding skills that get more complex. They will apply these to a specific context.</p> <p>Debug programs to ensure they accomplish specific goals</p> <p>Debug algorithms</p> <p>Write programs that accomplish specific goals</p> <p>Solve problems by deconstructing them into smaller parts</p> <p>Use Scratch to code movement, sound, clicking control and backdrop changes.</p> <p><u>Possible outcome:</u> Code a Scratch story with backdrops, sprites, animations and sounds.</p>		<p>Pupils learn to create and edit content on a range of software.</p> <p>Type and edit text using appropriate size, colour and font style.</p> <p>Add pictures and other media e.g. voice recording.</p> <p>Learn to adjust transitions between pages.</p> <p><u>Possible outcome</u> Create a non fiction book related to geographical study</p>	<p>Pupils will understand how technology can be used</p> <p>Discussion into why technology may create a quality comic.</p> <p>Creating backgrounds - add, resize and organise.</p> <p>Add characters.</p> <p>Create narrations, thoughts and dialogue using bubbles.</p> <p><u>Possible outcome:</u> Create your own comic strip.</p>
Key vocabulary	Cyberbullying, trustworthy, website, report, block, tell, dangers, respect, social media, password, cyber footprint, reputation, positives.	Key, layout, border, word art, type, space bar, enter, file, open, save as, cursor, images.	Algorithm, coding, debugging, decompose, troubleshoot, online, unplugged, systems, physical.		Size, font, bold, media, transition, edit, voice recording	Layout, links, webpage, drop downs, sections, information, hyperlinks, software, web address, edit, evaluate.
Required resources	iPads, thinkuknow, childnet.	iPads, iLearn2	iPads, iLearn2, Scratch		iPads, iLearn2	iPads, Comic Life

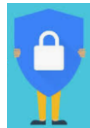



Year 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Overview Year 4	Online Safety 	Computing Skills Organisation 	Coding 		Computing Skills Presenting Information 	Creation Animation 	
Suggested content and progression	<p>Pupils will recognise how they are responsible for their actions online. They will learn the importance of passwords and the growing relevance of social media.</p> <p><i>To understand the different ways people communicate on the internet.</i></p> <p><i>To understand how the internet can affect our self-esteem.</i></p> <p><i>To know the laws surrounding social media.</i></p> <p><i>Know how to report cyber bullying.</i></p> <p><u>Possible outcome:</u> create an advertisement for an SVPS online safety campaign to be put on the school website.</p>	<p>Pupil will identify how technology can be used to organise information and documents.</p> <p><i>Know how to turn on, log in and open programmes on a laptop.</i></p> <p><i>Know how to save, find and open documents.</i></p> <p><i>Know how to navigate through File Explorer and create folders.</i></p> <p><i>Save work in specific areas using traceable, appropriate file names.</i></p> <p><u>Possible outcome:</u> create a week by week log of what you have been doing in school which is saved in specific weekly folders.</p>	<p>Pupils will create a code that will complete a desired outcome. They will plan and create the algorithms needed for the outcome.</p> <p><i>Code sprites to react to the clicker and other sprites.</i></p> <p><i>Be able to change controls by editing numbers in blocks.</i></p> <p><i>Be able to code an interactive animation using video sensing.</i></p> <p><i>Use Scratch to code variables to create a scoreboard.</i></p> <p><i>Debug programs to ensure they accomplish their goals</i></p> <p><u>Possible outcome:</u> Code an interactive game in Scratch.</p>	<p>Pupils will develop an understanding of how to make presenting information more engaging.</p> <p><i>Familiarise with features of presentations.</i></p> <p><i>Implement transitions from slide to slide.</i></p> <p><i>Use animations so that specific information appears simultaneously.</i></p> <p><u>Possible outcome:</u> create a presentation to showcase your learning in topic.</p>	<p>Pupils will use technology for creative purposes. They will understand how technology has multiple uses.</p> <p><i>Identify the various way animation is done.</i></p> <p><i>Duplicating slides</i></p> <p><i>Transitions with times</i></p> <p><i>Animate individual elements</i></p> <p><i>Create short gifs with pixel animation</i></p> <p><u>Possible outcome:</u> create an animation of a scene from your class reader.</p>		
	Key vocabulary	Cyberbullying, trustworthy, website, report, block, tell, dangers, respect, social media, password, cyber footprint, reputation, positives.	File explorer, file, save, open, organise, retrieve, information, documents.	Algorithm, coding, debugging, decompose, troubleshoot, online, unplugged, systems, physical, program, output, input.		Presentation, slides, transition, fade, speed, text, font, size, animations, software, program, cursor select.	Presentation, slides, transition, fade, duplicate, speed, text, object, size, animations, program, loop, movement.
		Required resources	iPads, thinkuknow, Google interland, iLearn2.	Laptops	iPads, iLearn2, Scratch	Laptops	Laptops, iLearn2

Year 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview Year 5	Online Safety 	Computing Skills Internet Surfing 	Coding 	Computing Skills Data Handling 	Robotic Coding 	
Suggested content and progression	<p>Pupils will understand how with independence comes danger and responsibilities.</p> <p>Revise the term Cyberbullying.</p> <p>Understand how identify, self-image and photos may not be true.</p> <p>To be aware of the dangers of sharing information, strangers and communicating online.</p> <p>Understand how to report inappropriate messages from online sources.</p> <p>Digital footprint - how what we do now can affect us in the future.</p> <p>Know how to protect yourself when gaming.</p> <p><u>Possible outcome:</u> Design a presentation about how to be responsible online.</p>	<p>Pupils will recognise how to use the internet to use technology in different areas of the curriculum.</p> <p>Identify areas where the internet is useful.</p> <p>Discuss the reliability of information.</p> <p>Understand the terms: plagiarism and copyrighting.</p> <p>Use the internet for product research.</p> <p><u>Possible outcome:</u> Create a moodboard of previous products for D and T.</p>	<p>Pupils will examine a variety of different types of coding skills that develop in complexity.</p> <p>Write a program that accomplishes a specific goal.</p> <p>Debug programs to complete a specific outcome.</p> <p>Learn to code simple instructions on Swift Playgrounds.</p> <p>Understand how code is written using script rather than blocks.</p> <p><u>Possible outcome:</u> Complete Tutorials on Swift Playgrounds</p>	<p>Pupils will understand how different formula create a range of different functions.</p> <p>Understand the features of excel.</p> <p>Understand formula.</p> <p>Develop use of formula for desired outcome.</p> <p>Use formula for own outcome.</p> <p>Know how to create a simple graph.</p> <p><u>Possible outcome:</u> Create a table that can count house points.</p>	<p>Pupils will code Sphero to complete a range of tasks.</p> <p>Learn to make Sphero move in a variety of ways.</p> <p>Code Sphero to turn.</p> <p>Code Sphero to change colour.</p> <p>Make Sphero move through a channel.</p> <p>Take Sphero through a maze.</p> <p><u>Possible outcome:</u> Guide Sphero through an assault course</p> <p>Compete in Sphero Olympics</p>	
Key vocabulary	Cyberbullying, trustworthy, website, report, block, tell, dangers, respect, social media, password, cyber footprint, reputation, positives.	Internet, World Wide Web, surfing, reliability, refine, advanced search, search engines, sources, website, digital manipulation, product.	Algorithm, coding, debugging, decompose, troubleshoot, online, unplugged, systems, physical, program, output, input. Swift Playgrounds	Cell, formula, output, outcome, Excel, program, column, row, data, table.	Scene, background, algorithm, debug, program, game, character, game, environment, goal.	
Required resources	Thinkuknow, laptop, iLearn2	Laptops	iPads	Laptops, iLearn2	iPads, Sphero	

Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Overview Year 6	Online Safety 	Computing Skills Internet Surfing 	Robotic Coding 	Creation Movie making 		
Suggested content and progression	<p>Pupils will recognise the importance of how they conduct themselves online.</p> <p><i>Understand the importance of culture that promotes reporting of cyber bullying.</i></p> <p><i>Discuss and understand why photos are sometimes manipulated digitally.</i></p> <p><i>To know the dangers of communicating with strangers online.</i></p> <p><i>Understand the term digital footprints and how it can impact your life.</i></p> <p><i>To discuss and understand the advantages and disadvantages of mobile phones.</i></p> <p><u>Possible outcome:</u> create a presentation that will help others stay safe on the internet.</p>	<p>Pupils will deepen their understanding of the validity of the internet and sourcing information from a range of places.</p> <p><i>Comparing books to the internet.</i></p> <p><i>Understand the benefits of using a range of sources.</i></p> <p><i>Create a timeline relating to your topic.</i></p> <p><i>Create hyperlinks on your presentation.</i></p> <p><u>Possible outcome:</u> create a timeline for the various significant events in your topic.</p>	<p>Pupils will code Sphero to complete a range of tasks.</p> <p><i>Learn to make Sphero move in a variety of ways</i></p> <p><i>Code Sphero to turn</i></p> <p><i>Code Sphero to change colour</i></p> <p><i>Make Sphero move through a channel</i></p> <p><i>Take Sphero through a maze</i></p> <p><u>Possible outcome:</u> Guide Sphero through an assault course</p> <p>Compete in Sphero Olympics</p>	<p>Pupils will create a movie using a range of features from iMovie app</p> <p><i>Learn to insert photos and movie clips into a movie.</i></p> <p><i>Learn to edit photos using cropping, duplicate, filter and timing tools.</i></p> <p><i>Add text to relevant parts of the movie.</i></p> <p><i>Add trailers to movie.</i></p> <p><i>Learn to add music to movie (including own music from garage band).</i></p> <p><i>Learn to edit music using fade and cropping tools.</i></p> <p><u>Possible outcome:</u> Create own movie using photos and videos to represent a retrospective of their time in SVPS</p>		
	Key vocabulary	Cyberbullying, trustworthy, website, report, respect, social media, password, cyber footprint, reputation, positives, appropriate, PEGI	Internet, surfing, reliability, refine, advanced search, search engines, sources, website, digital manipulation.	Algorithm, instructions transition, fade, duplicate, speed, text, object, size, animations, program, loop, movement.	Movie, edit, crop, fade, media, filter, duplicate, trailer	
Required resources	iPads, laptops	iPads, laptops	Laptops	iPads		