

# Spring Meadow Primary and 'School House' Nursery



## Computing Curriculum Overview

## Computing Curriculum

### Purpose of study

Our school offers a high-quality computing education that develops pupils' computational thinking whereby pupils learn how to recognise problems and approach them in a controlled and systematic way. Our curriculum inspires pupils' creativity and curiosity of the forever changing world of technology. Through our teaching of computing, we encourage pupils to explore and use various forms of information technology and develop their computer science skills to support problem solving. Our computing curriculum actively encourages pupils to become digitally literate by enabling them to express themselves and develop their ideas whilst also highlighting the importance of being safe and responsible technology users. Computing enables pupils to be active participants in a digital world and prepares them for future career opportunities.

### Aims

*'Alan Turing gave us a mathematical model of digital computing that has completely withstood the test of time. He gave us a very, very clear description that was truly prophetic'-George Dyson*

Our school's computing curriculum aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science linked to yearly outcomes.
- Can analyse and solve computational problems, and have repeated practical experience of writing computer programs using algorithms.
- Can evaluate information technology, including new or unfamiliar programs through making links to the wider world of technology.
- Are responsible and safe users who fully understand the impact of their own and others' actions whilst using the internet.
- Are competent, confident and creative users of information and communication technology.

### Organisation

- We have sets of iPads and laptop computers that allow computing to be taught flexibly in the classrooms

- Classes are also encouraged to use various other technologies within their classrooms.
- All classes are given the opportunity to use the class set of iPads to support learning in all areas of the curriculum, not just computing.

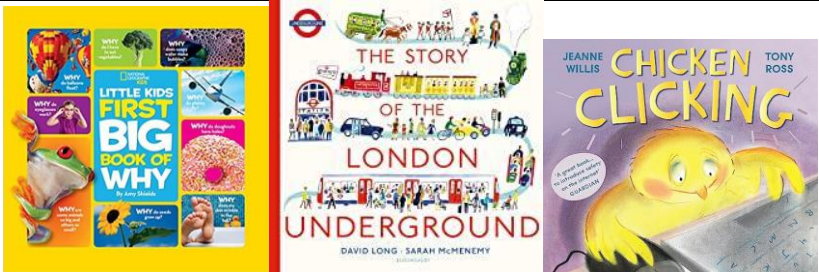

### Progression

Aspect	Nursery	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Information Technology</b>	<p>To explore how things work by investigating a range of different technologies.</p> <p>To show interest in different occupations and use this within play.</p>	<p>To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.</p> <p>To make use of props and materials when role playing characters in narratives and stories.</p>	<p>To be able to use software under the control of the teacher to create, store and edit digital content using appropriate file and folder names. Can talk about their work and make changes to improve it. To share their experiences of technology in school and beyond the classroom.</p>	<p>To use technology with increasing independence to purposefully organise digital content. To be able to show an awareness for the quality of digital content collected.</p>	<p>To be able to use a variety of software to manipulate and present digital content: data and information. Can talk about their work and make improvements to solutions based on feedback received.</p>	<p>To be able to collect, organise and present data and information in digital content. To create digital content to achieve a given goal through combining software packages and internet services to communicate with a wider audience e.g. blogging. Can make appropriate improvements to solutions based on feedback received, and can comment on the success of the solution.</p>	<p>To be able to make judgements about digital content when evaluating and repurposing it for a given audience. To recognise the audience when designing and creating digital content. To understand the potential for collaboration when computers are networked. Can use criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution, and future solutions.</p>	<p>To evaluate the appropriateness of digital devices, internet services and application software to achieve given goals. To recognise ethical issues surrounding the application of information technology beyond school. To design criteria to critically evaluate the quality of solutions, uses the criteria to identify improvements and can make appropriate refinements to the solution.</p>

<b>Computer Science</b>	To offer explanations for why things might happen, making use of recently introduced vocabulary.	To participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.  To offer explanations for why things might happen, making use of recently introduced vocabulary.	To understand what an algorithm is and to create simple linear algorithms.  To know that users can develop their own programs and can demonstrate this using programmable robots (e.g – BeeBots) by checking and making changes. To understand that programs perform by following precise instructions.	To understand that computers need precise instructions known as algorithms and to demonstrate care and precision to avoid errors. To use logical reasoning to predict outcomes to detect and correct errors through debugging.  To use logical reasoning to predict the behaviour of programs. To detect and correct simple errors e.g debugging in programs.	To be able to identify patterns in an algorithm. To be able to create algorithms for programming projects.  To be able to create programs that use algorithms to achieve given goals. To recognise and assign variables.	To be able to design algorithm solutions that use repetition and simple selection. To use logical reasoning to predict outputs, showing an awareness of inputs.  To use logical reasoning to systematically detect and correct errors in programs.	To be able to show awareness of tasks that are best completed by humans or computers. To design solutions by decomposing a problem. To recognise that different solutions can exist for the same problem.  To create programs by decomposing them into smaller parts. To use a variety of selection commands in programs and use conditions in repetition commands.	To understand that a loop is the repetition of a process. To recognise that different algorithms exist for the same problem. To identify similarities and differences and use these to solve problems (pattern recognition).  To be able to design, write and debug modular programs using procedures and know that procedure can hide detail (procedural abstraction).
<b>Digital Literacy/E-Safety</b>	To show an understanding of their own feelings and those of others, and begin to	To show an understanding of their own feelings and those of others, and begin to	To be able to access chosen content using a web browser. To understand the importance of communicating	To be able to navigate the web and carry out simple web searches to collect digital content. To demonstrate the	To understand the difference between the internet and internet service e.g. world wide web. To show an awareness of,	To understand how to effectively use search engines, and knows how search results	To understand how search engines rank search results. To know how to use search technologies effectively.	To know how to be a fully responsible internet user. To know how to construct static web pages using HTML. To be able

	regulate their behaviour accordingly.	regulate their behaviour accordingly.  To understand what personal information is.	safely and respectfully online, and the need for keeping personal information private. To know what to do when concerned about content or being contacted.	use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online.	and can use a range of internet services. Can recognise what is acceptable and unacceptable behaviour when using technologies and online services.	are selected. Demonstrates responsible use of technologies and online services, and knows a range of ways to report concerns.	To understand that web spiders index the web for search engines.	to guide others in how to use the internet safely and how to report concerns.
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### Unit Planner

Year	Subject related themes	Book Led Curriculum Coverage
Nursery	<p><b>Photography and Digital Art</b> - Ourselves (Pic Collage)</p> <p><b>Programming</b> - Moving and growing (Scratch Jr)</p> <p><b>Video Creation</b> - At the farm (Shadow Puppets Edu)</p> <p><b>Video Creation</b> - Fantastic food (Do Ink Green Screen)</p> <p><b>Animation</b> - Under the sea (Chatterpix Kids)</p> <p><b>Presentation</b> - In the garden (Pic Collage)</p>	
EYFS	<p><b>Animation</b> - Animated Object (Chatterpix Kids)</p> <p><b>Programming</b> - Animated Character (Scratch Jr)</p> <p><b>Presentation</b> - Collage (Pic Collage)</p> <p><b>Video Creation</b> - News Report (Do Ink Green Screen)</p> <p><b>Understanding the world</b> - Exploring the world (Google Earth)</p> <p><b>Video Creation</b> (Shadow Puppets Edu)</p>	

<p>Year 1</p>	<p><b>Animation</b> - Animated Character (Chatterpix Kids)  <b>Video Creation</b> (Shadow Puppets Edu)  <b>Video Creation</b> - Retell a story (Keynote)  <b>Data Handling</b> - Pictograms (Pic Collage or Seesaw)  <b>Presentations</b> - Storyboard (Pic Collage or Seesaw)  <b>Programming</b> - Robot Maze Game (Scratch Jr)</p>	
<p>Year 2</p>	<p><b>Presentations</b> - Interactive Image (Thinglink)  <b>Photo and Digital Art</b> - Photoshopping (Pic Collage)  <b>Data Handling</b> - Venn Diagram (Pic Collage or Seesaw)  <b>Presentation</b> - Animal Catchphrase Quiz (Keynote)  <b>Artificial Intelligence</b> - AI Advantages Video (Shadow Puppets Edu)  <b>Programming</b> - Knock Knock Joke (Scratch Jr)</p>	
<p>Year 3</p>	<p><b>Data Handling</b> - Story Graphs (Seesaw)  <b>Photo and Digital Art</b> - Digital Self Portrait (Keynote)  <b>Video Creation</b> - Voiceover (iMovie)  <b>Sound</b> - Podcasting (Pages and Keynote)  <b>Artificial Intelligence</b> - Exploring Data (Do Ink Green Screen)  <b>Computer Networks</b> - Network Explorer (Adobe Spark Video)</p>	

<p>Year 4</p>	<p><b>Presentations</b> - Quiz eBook (Book Creator)  <b>Animation</b> - Line Draw Animation (Keynote)  <b>Data Handling</b> - Online Questionnaire (Google Forms)  <b>Video Creation</b> - Dynamic Video (Adobe Spark Video)  <b>Sound</b> - Movie Soundtrack (iMovie and Garageband)  <b>Computer Networks</b> - Understanding the Internet (Do Ink Green Screen and iMovie)</p>	
<p>Year 5</p>	<p><b>Sound</b> - 4 Chord Remix (Garageband)  <b>Animation</b> - Character Interview (Animate Anything)  <b>Animation</b> - Animated Scene (Keynote)  <b>Video Creation</b> - News Report (Do Ink Green Screen and iMovie)  <b>Programming</b> - Platform Game (Scratch Jr)  <b>Computer Networks</b> - Search Engines (Adobe Spark)</p>	
<p>Year 6</p>	<p><b>Augmented Reality and Virtual Reality</b> - Interactive VR (Thinglink)  <b>Presentations</b> - App Prototype (Keynote and Powerpoint)  <b>Animation</b> - 3D Animation (Plotagon)  <b>Animation</b> - Animated Cartoon Character GIF (Keynote)  <b>Video Creation</b> - Green Screen Special Effects (Do Ink Green Screen and iMovie)  <b>Sound</b> - Podcasting (Garageband)</p>	

Knowledge Progression

<u>Unit</u>	
<b><u>Nursery</u></b>	
Photography and Digital Art (Ourselves)	<p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● I can take a photograph.</li> <li>● I can take a photograph and use it in an app.</li> </ul> <p><b><u>Presentations, web design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● I can create a simple digital collage.</li> </ul>
Programming (Moving and growing)	<p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● I can follow simple oral instructions.</li> <li>● I can spot simple patterns, such as similarities and differences.</li> </ul> <p><b><u>Coding and Programming</u></b></p> <ul style="list-style-type: none"> <li>● I can use a mouse, touch screen or appropriate access device to target and select options on screen.</li> <li>● I can input a simple sequence of commands to control a digital device with support</li> </ul>
Video Creation (At the farm)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● I can record and play a film.</li> <li>● I can watch films back.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● I can find ways to change your voice (tube, tin can, shouting to create an echo).</li> <li>● I can record sounds/voices in storytelling and explanations.</li> </ul>
Video Creation (Fantastic food)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● I can record a short film using the camera.</li> <li>● I can record and play a film.</li> <li>● I can watch films back.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● I can find ways to change your voice (tube, tin can, shouting to create an echo).</li> <li>● I can record sounds/voices in storytelling and explanations.</li> </ul>
Animation (Under the sea)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● I can animate a simple image to speak in role.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● I can find ways to change your voice (tube, tin can, shouting to create an echo).</li> <li>● I can record sounds/voices in storytelling and explanations.</li> </ul>
Presentation (In the garden)	<p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● I can take a photograph.</li> </ul>

	<ul style="list-style-type: none"> <li>I can take a photograph and use it in an app.</li> </ul> <p><b><u>Presentations, web design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>I can create a simple digital collage.</li> </ul>
<b><u>Early Years Foundation Stage</u></b>	
Animation (Animated Object)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>I can animate a simple image to speak in a role.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>I can record sounds with different resources.</li> </ul>
Programming (Animated Character)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>I can create a simple animation to tell a story including more than one character.</li> </ul> <p><b><u>Coding and Programming</u></b></p> <ul style="list-style-type: none"> <li>I can use a mouse, touch screen or appropriate access device to target and select options on screen.</li> <li>I can input a simple sequence of commands to control a digital device with support.</li> </ul>
Presentation (Collage)	<p><b><u>Presentations, web design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>I can record my voice over a picture.</li> <li>I can create a simple digital collage.</li> <li>I can move and resize images with my fingers or mouse.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>I can take a photograph.</li> <li>I can take a photograph and use it in an app.</li> </ul>
Video Creation (News Report)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>I know the difference between photography and video.</li> <li>I can record a short film using the camera.</li> <li>I can record and play a film.</li> <li>I can watch films back.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>I can record sounds with different resources.</li> <li>I can find ways to change your voice (tube, tin can, shouting to create an echo).</li> <li>I can record sounds/voices in storytelling and explanations.</li> </ul>
Understanding the world (Exploring the world)	<p><b><u>Understanding the world</u></b></p> <ul style="list-style-type: none"> <li>Describe their immediate environment using knowledge from observation, discussion and maps.</li> </ul>

	<ul style="list-style-type: none"> <li>● Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from maps.</li> </ul>
Video Creation (Video)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● I know the difference between photography and video.</li> <li>● I can record a short film using the camera.</li> <li>● I can record and play a film.</li> <li>● I can watch films back.</li> </ul>
<b><u>Year 1</u></b>	
Animation (Animated Character)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to animate a simple image to speak in a role.</li> <li>● To know how to add filters and stickers to enhance an animation of a character.</li> </ul>
Video Creation (Video)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to select images and record a voiceover.</li> <li>● To know how to highlight and zoom into images as I record.</li> </ul>
Video Creation (Retell a story)	<p><b><u>Presentations, web design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to order images to create a simple storyboard.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● To know how to record my voice and add different effects.</li> </ul>
Data Handling (Pictograms)	<p><b><u>Data Handling</u></b></p> <ul style="list-style-type: none"> <li>● To know how to sort images or text into two or more categories on a digital device.</li> <li>● To know how to collect data on a topic.</li> <li>● To know how to create a tally chart and pictogram.</li> <li>● To know how to record myself explaining what I have done and what it shows me.</li> </ul>
Presentations (Storyboard)	<p><b><u>Presentation</u></b></p> <ul style="list-style-type: none"> <li>● To order images to create a simple storyboard.</li> <li>● To sequence a series of pictures to explain my understanding of a topic.</li> </ul>

	<p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>• To critically evaluate my work and suggest improvements.</li> </ul> <p><b><u>Online Reputation</u></b></p> <ul style="list-style-type: none"> <li>• To explain how I am developing an online reputation which will allow other people to form an opinion of me.</li> <li>• To describe some simple ways that help build a positive online reputation</li> </ul>
Programming (Robot Maze Game)	<p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>• To understand the sequence of algorithms is important.</li> <li>• To know how to debug simple algorithms.</li> </ul> <p><b><u>Coding and Programming</u></b></p> <ul style="list-style-type: none"> <li>• To know how to create a simple program on a digital device e.g. Bee Bot or tablet.</li> <li>• To know how to use sequence in programs</li> <li>• To know how to locate and fix bugs in my program</li> </ul>
<b><u>Year 2</u></b>	
Presentation (Interactive Images)	<p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>• To know how to add voice labels to an image.</li> </ul>
Photography and Digital Art (Photoshopping)	<p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>• To know how to add voice labels to an image.</li> </ul>
Data Handling (Venn Diagram)	<p><b><u>Word Processing and Typing</u></b></p> <ul style="list-style-type: none"> <li>• To know how to use the space bar only once between words and use touch to navigate to words letter to edit.</li> <li>• To know how to copy and paste images and text.</li> <li>• To know how to use caps locks for capital letters.</li> <li>• To know how to add images alongside text in a word processed document.</li> </ul> <p><b><u>Data Handling</u></b></p>

	<ul style="list-style-type: none"> <li>● To know how to sort digital objects into a range of charts such as Venn diagrams, Carroll diagrams and bar charts using different apps and software.</li> <li>● To know how to orally record myself explaining what the data shows me.</li> </ul>
Presentations (Animal Catchphrase Quiz)	<p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to add voice labels to an image.</li> <li>● To know how to import images to a project from the web and camera roll.</li> <li>● To know how to use some built- in animations in presentation software.</li> </ul>
Artificial Intelligence (AI Advantages Video)	<p><b><u>Artificial Intelligence</u></b></p> <ul style="list-style-type: none"> <li>● To explain some advantages and disadvantages of using simple AI technology.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to use tools to add effects to a video.</li> </ul> <p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to add a voice recording to a storyboard.</li> </ul>
Programming (Knock Knock Joke)	<p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To understand decomposition is breaking objects/processes down.</li> <li>● To know how to debug algorithms.</li> </ul> <p><b><u>Coding and Programming</u></b></p> <ul style="list-style-type: none"> <li>● To understand programs follow precise instructions.</li> <li>● To know how to create programs using different digital devices E.g. Bee Bot or ScratchJr on a tablet.</li> <li>● To know how to debug programs of increasing complexity.</li> <li>● To know how to use logical reasoning to predict the outcome of simple programs.</li> </ul>

Year 3	
Data Handling (Story Graphs)	<p><b><u>Data Handling</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create my own sorting diagram and complete a data handling activity with it using images and text.</li> <li>● To know how to create a feelings chart exploring a story or character's feelings.</li> </ul>
Photography and Digital Art (Digital Self Portrait)	<p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create a digital image using a range of tools, pens, brushes and effects.</li> </ul> <p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To understand abstraction is focusing on important information.</li> </ul> <p><b><u>Self-Image and Identity</u></b></p> <ul style="list-style-type: none"> <li>● To explain how people can represent themselves in different ways online</li> <li>● To explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) and why.</li> </ul>
Video Creation (Voiceover)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to sequence clips of mixed media in a timeline and record a voiceover.</li> </ul>
Sound (Podcasting)	<p><b><u>Word processing and Typing</u></b></p> <ul style="list-style-type: none"> <li>● To combine digital images from different sources, objects, and text to make a final piece of a variety of tasks: posters, documents, eBooks, scripts, leaflets.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To write and record a script using a teleprompter tool.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● To edit sound effects for a purpose.</li> </ul>

	<ul style="list-style-type: none"> <li>● To record a radio broadcast or audiobook.</li> </ul>
Artificial Intelligence (Exploring Data)	<p><b><u>Artificial Intelligence</u></b></p> <ul style="list-style-type: none"> <li>● To understand that data is used to train AI technology.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to independently create a green screen clip.</li> </ul>
Computer Networks (Network Explorer)	<p><b><u>Computer Networks</u></b></p> <ul style="list-style-type: none"> <li>● To understand that the computers in a school are connected together in a network</li> <li>● To understand why computers are networked.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to sequence clips of mixed media in a timeline and record a voiceover.</li> </ul>
<b><u>Year 4</u></b>	
Presentation (Quiz eBook)	<p><b><u>Presentation</u></b></p> <ul style="list-style-type: none"> <li>● To create an interactive quiz eBook introducing hyperlinks.</li> </ul>
Animation (Line Draw Animation)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create a presentation demonstrating my understanding with a range of media.</li> <li>● To know how to use line draw tool to create animations.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to add animated titles and transitions.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to use shapes and drawing tools to create digital art.</li> </ul> <p><b><u>Self-Image and Identity</u></b></p>

	<ul style="list-style-type: none"> <li>● To demonstrate responsible choices about my online identity, depending on context.</li> </ul>
Data Handling (Online Questionnaire)	<p><b><u>Word Processing and Typing</u></b></p> <ul style="list-style-type: none"> <li>● To know how to confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text.</li> </ul> <p><b><u>Data Handling</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create and publish my own online questionnaire and analyse the results.</li> </ul>
Video Creation (Dynamic Video)	<p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to sequence clips of mixed media in a timeline and record a voiceover.</li> <li>● To know how to evaluate and improve the best video tools to best explain my understanding.</li> </ul>
Sound (Movie Soundtrack)	<p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● To know how to edit sound effects for a purpose.</li> <li>● To know how to compose a soundtrack that can be added to a film project.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to add music and sound effects to my films.</li> </ul>
Computer Networks (Understanding the Internet)	<p><b><u>Computer Networks</u></b></p> <ul style="list-style-type: none"> <li>● To understand the Internet is a worldwide network.</li> <li>● To understand how web pages are viewed across the Internet.</li> <li>● To understand the difference between the Internet and the World Wide Web.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to confidently use a green screen adding animated backgrounds.</li> </ul>
<b><u>Year 5</u></b>	
Sound (Four Chord Remix)	<b><u>Sound</u></b>

	<ul style="list-style-type: none"> <li>● To know how to create a simple four chord song following the correct rhythm.</li> <li>● To know how to create a remix of a popular song.</li> </ul> <p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To know how to solve problems by decomposing them into smaller parts.</li> <li>● To know how to critically evaluate my work and suggest improvements.</li> </ul>
Animation (Character Interview)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to take multiple animations of a character I have created and edit them together for a longer video.</li> <li>● To know how to record animations of different characters and edit them together to create an interview.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to evaluate and improve the best video tools to best explain my understanding.</li> </ul>
Animation (Animated Scene)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to effectively use animation tools in presenting software to create animations.</li> </ul> <p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create and export an interactive presentation including a variety of media, animations, transitions and other effects.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to manipulate shapes to create digital art.</li> </ul> <p><b><u>Online Reputation</u></b></p> <ul style="list-style-type: none"> <li>● To explain the ways in which anyone can develop a positive online reputation.</li> </ul>
Video (News Report)	<p><b><u>Word Processing and Typing</u></b></p>

	<ul style="list-style-type: none"> <li>● To know how to organise and reorganise text on screen to suit a purpose.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to use cutaway and split screen tools in iMovie.</li> <li>● To know how to evaluate and improve the best video tools to best explain my understanding.</li> <li>● To know how to further improve green screen clips using crop and resize and explore more creative ways to use the tool - wearing green clothes and the masking tool.</li> </ul> <p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To know how to solve problems by decomposing them into smaller parts.</li> </ul>
Programming (Platform Game)	<p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To know how to use logical reasoning to explain how a variety of algorithms work.</li> <li>● To know how to evaluate the effectiveness of algorithms.</li> </ul> <p><b><u>Coding and Programming</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create programs by decomposing them into smaller parts.</li> <li>● To know how to use a variety of selection commands in programs.</li> <li>● To know how to use conditions in repetition commands.</li> <li>● To know how to work with variables.</li> <li>● To know how to create programs that control or simulate physical systems.</li> <li>● To know how to evaluate my work and identify errors.</li> </ul>
Computer Networks (Search Engines)	<p><b><u>Computer Networks</u></b></p> <ul style="list-style-type: none"> <li>● To understand that web spiders index the web for search engines</li> <li>● To appreciate how pages are ranked in a search engine.</li> </ul> <p><b><u>Presentations, Web Design and eBook Creation</u></b></p>

	<ul style="list-style-type: none"> <li>● To know how to create and export an interactive presentation including a variety of media, animations, transitions and other effects.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to enhance digital photos and images using crop, brightness and resize tools.</li> </ul>
<b><u>Year 6</u></b>	
<p>Augmented Reality/Virtual Reality (Interactive VR)</p>	<p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create an interactive guide to an image by embedding digital content and publishing it online.</li> <li>● To know how to create a web site which includes a variety of media.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create videos using a range of media - green screen, animations, film and image.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to make a digital photo using camera settings.</li> </ul> <p><b><u>Augmented Reality and Virtual Reality</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create an interactive VR experience.</li> <li>● To know how to explain how VR and AR works.</li> </ul> <p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To know how to decompose a design or code to focus on specific parts.</li> </ul>
<p>Presentations (App Prototype)</p>	<p><b><u>Word Processing and Typing</u></b></p> <ul style="list-style-type: none"> <li>● To know how to confidently choose the best application to demonstrate my learning.</li> <li>● To know how to format text to suit a purpose.</li> <li>● To know how to publish my documents online regularly and discuss the audience and purpose of my content.</li> </ul> <p><b><u>Presentations, Web Design and eBook Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to design an app prototype that links multimedia pages together with hyperlinks.</li> </ul>

	<ul style="list-style-type: none"> <li>● To know how to choose applications to communicate to a specific audience.</li> <li>● To know how to evaluate my own content and consider ways to improve.</li> </ul> <p><b><u>Photography and Digital Art</u></b></p> <ul style="list-style-type: none"> <li>● To know how to edit a picture to remove items, add backgrounds, merge 2 photos.</li> </ul>
Animation (3D Animation)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to plan, script and create a 3D animation to explain a concept or tell a story.</li> <li>● To know how to choose and create different types of animations to best explain my learning.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to add animated subtitles to my film to further enhance my creation.</li> <li>● To know how to create videos using a range of media - green screen, animations, film and image.</li> </ul>
Animation (Animated Cartoon Character GIF)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to choose and create different types of animations to best explain my learning.</li> <li>● To make an animated talking Gif of a cartoon character.</li> </ul>
Video Creation (Green Screen Special Effects)	<p><b><u>Animation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to choose and create different types of animations to best explain my learning.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To know how to create videos using a range of media - green screen, animations, film and image.</li> </ul> <p><b><u>Computational Thinking</u></b></p> <ul style="list-style-type: none"> <li>● To know how to critically evaluate my work and suggest improvements.</li> </ul> <p><b><u>Online Reputation</u></b></p> <ul style="list-style-type: none"> <li>● To explain the ways in which anyone can develop a positive online reputation.</li> </ul>

Sound (Podcasting)	<p><b><u>Word Processing and Typing</u></b></p> <ul style="list-style-type: none"> <li>● To combine digital images from different sources, objects, and text to make a final piece of a variety of tasks: posters, documents, eBooks, scripts, leaflets.</li> </ul> <p><b><u>Video Creation</u></b></p> <ul style="list-style-type: none"> <li>● To write and record a script using a teleprompter tool.</li> </ul> <p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>● To experiment with live loops to create a song.</li> <li>● To edit sound effects for a purpose.</li> <li>● To record a radio broadcast or audiobook.</li> </ul>
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Nursery - Vocabulary					
Photography and Digital Art (Ourselves)	Programming (Moving and growing)	Video Creation (At the farm)	Video Creation (Fantastic food)	Animation (Under the sea)	Presentation (In the garden)
Image	Order	Search	Search	Upload	Image
Save	Digital	Title	Title	Object	Save
Resize	Program	Record	Record	Save	Resize
Background	Follow	Pause	Pause	Record	Background
Drag	Code	Undo	Undo	Playback	Drag

**EYFS - Vocabulary**

Animation (Animated Object)	Programming (Animated Character)	Presentation (Collage)	Video Creation (News Report)	Understanding the world (Exploring the world)	Video Creation (Video)
Upload	Sequence	Image	Search	Maps	Search
Object	Order	Edit	Title	Search	Title
Draw	Digital	Resize	Record	Scroll	Record
Record	Program	Background	Pause	Text	Pause
Playback	Follow	Drag	Undo	Countries	Undo
Stickers	Code	Save	Zoom	Places	Zoom
Save	Fix	Upload	Text	Globe	Text

YEAR 1 - Vocabulary					
Animation (Animated Character)	Video Creation (Video)	Video Creation (Retell a Story)	Data Handling (Pictograms)	Presentations (Storyboard)	Programming (Robot Maze Game)
Upload	Search	Labels	Sort	Sort	Algorithm
Character	Select	Order	background	Pinch	Sequence
Draw	Rearrange	Storyboard	Data	Background	Order
Record	Title	Sequence	Emoji	Emoji	Bug
Playback	Text	Voice	Image	Image	Fix
Filter	Record	Record	Edit	Edit	Precise
Stickers	Pause	Edit	Shape	Shape	Digital
Save	Undo		Table	Table	Program
Export	Zoom		Resize	Resize	Follow
	Pan		Drag	Drag	Code
	Highlight		Save	Save	

YEAR 2 - Vocabulary					
Presentation (Interactive Images)	Photography and Digital Art (Photoshopping)	Data Handling (Venn Diagram)	Presentations (Animal Catchphrase Quiz)	Artificial Intelligence (AI Advantages Video)	Programming (Knock Knock Joke)
Upload	Upload	Background	Animate	Artificial Intelligence	Decomposition
Image	Image	Upload	Resize	AI	Debug

Add	Add	Lock	Voice labels	Technology	Reason
Tag	Tag	Text	Import	Voice assistant	Detail
Label	Label	Labels	Tag	Text	Breakdown
Audio	Audio	Font	Add to	recognise	Task
Media	Media	Emoji	Right click		Precise
Copy	Copy	Record	Layout		Logical reasoning
Save	Save	audio	Format		Prediction
		Caps lock			Debug
		Cut			Sequence
		Copy			
		Paste			
		Image			

<b>YEAR 3 - Vocabulary</b>					
<b>Data Handling (Story Graphs)</b>	<b>Photography and Digital Art (Digital Self Portrait)</b>	<b>Video Creation (Voiceover)</b>	<b>Sound (Podcasting)</b>	<b>Artificial Intelligence (Exploring Data)</b>	<b>Computer Networks (Network Explorer)</b>
Graph	Animate	Project	Media	Artificial Intelligence	Network
Axis	GIF	Media	Interactive	AI	Server
Line	Transitions	Image	Audio	Train	Client
Shape	Ordering	Video	Edit	Pattern	LAN (Local Area Network)
Background	Trim	Timeline	Rhythm	Features	Switch
Upload	Transparent	Split	Input	Data	
Record	Remove background	Record	Output	Machine learning	
Label	Export	Replay	Selection		
Pen tool		Soundtrack	Mix		
		Volume			
		Filter			

**YEAR 4 - Vocabulary**

Presentation (Quiz eBook)	Animation (Line Draw Animation)	Data Handling (Online Questionnaire)	Video Creation (Dynamic Video)	Sound (Movie Soundtrack)	Computer Networks (Understanding the Internet)
Hyperlinks	Animate	Cut	Slide	Record	Internet
Image	Resize	Copy	Video	Autoplay	Router
Media	Undo	Paste	Trim	Chords	Data
Object	Line	Online	Volume	Count	Webpage
Export	Draw	Questionnaire	Icon	Track	Submarine cable
	Build in	Formatting	Search	Loop	
	Format	Multiple choice	Record	Bars	
	Ordering	Checkbox	Order	Section	
	Opacity	Share	soundtrack	Export	
			Layout	Countdown	
			Split screen		

YEAR 5 - Vocabulary					
Sound (Four Chord Remix)	Animation (Character Interview)	Animation (Animated Scene)	Video Creation (News Report)	Programming (Platform Game)	Computer Networks (Search Engines)
Chorus	Import	Animate	Cutaway	Evaluation	Search engine
Chords	Export	Slide layout	Split screen	Effectiveness	Spiders
Tempo	Trim	Slideshow	Chroma key	Complexity	Index
Compose	Clips	Transitions	Crop	Data	Ranked
Record	Media library	Embed	Resize	Prediction	Rankin algorithm
Metronome	Subtitles	Publish	Teleprompter	Condition	keyword
BPM (beats per minute)	Timeline	Instant alpha	Masking	Data	
Remix			Timeline	Memory	
Export			import	Variables	
			trim	value	
				Initialisation	
				Control	
				Simulate	
				Physical system	

<b>YEAR 6 - Vocabulary</b>					
<b>Augmented Reality/Virtual Reality (Interactive VR)</b>	<b>Presentations (App Prototype)</b>	<b>Animation (3D Animation)</b>	<b>Animation (Animation Cartoon Character GIF)</b>	<b>Video Creation (Greenscreen Special Effects)</b>	<b>Sound (Podcasting)</b>
Embed	Prototype	Staging	Animate	Layer	Chorus
Virtual reality	Transition	Aspect ratio	GIF	Trim	Compose
VR	Animation	Computer generated imagery (CGI)	Transitions	Edit	Record
Aspect ratio	Layout	Angles	Ordering	Export	Remix
Upload	Duplicate	Overlay	Trim	Special effects	Export
Trim	Navigation	Cut scene	Transparent	Voiceover	
Record	Homepage		Remove background	Import	
Export	Instant alpha		Export	soundtrack	
				Chroma key	
				Crop	