

Computing Curriculum Overview

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<u>We All Belong Here</u> Navigate ipads. Identify technology in the wider world.	<u>Why Do Squirrels Hide Their Nuts</u> Use technology for a purpose including apps and photography. Create verbal algorithms.	<u>Winter Wonderland</u> Program Bee Bots with simple instructions. Develop verbal algorithms.	<u>Dinosaur Stomp</u> How and when to share information. Online safety. Combine words and pictures to create a talking book.	<u>The Sights and Sounds of Africa</u> Create animation using an app. Create algorithms to move Bee Bots.	<u>Mad About Minibeasts</u> Draw using an app. Predict outcomes of algorithms.
1	<u>Space</u> Digital literacy Common uses of ICT in school Use animation program Use camera app Record spoken voice Create digital content -order pictures. Use animation program and make improvements. Common uses of ICT home Online Safety Access online content (login) What is personal information?	<u>School Days</u> Computing What an algorithm is Follow algorithms in a practical way by giving a series of instructions Debugging practically Online Safety Passwords to protect devices.	<u>No Place Like Home</u> Computing Use algorithms and directions to move a Bee Bot. What a program is. Online Safety Communicate respectfully on line in different ways.	<u>Monarchs</u> Digital literacy Sort images of the local area and add labels Use animation with spoken voice Common uses of ICT jobs Purple Mash – paint project using templates. Make changes based on feedback. Common uses of ICT – pictures, posters, printing etc Combine images and sentences on ipads Common uses of ICT to present letters, information, books etc Online Safety How to behave politely online with people I know well.	<u>Rio de Vida</u> Computing Use arrow cards to express an algorithm and apply to an app Debug, udo and retry and action Online Safety Recognise that people online can be unkind. When to speak to an adult.	<u>Enchanted Woodland</u> Digital literacy Animation Online Safety Explain rules to stay safe online.
2	<u>Bright Lights, Big City</u> Digital Literacy Save and access work on Purple Mash- writing project (ipads) Save pictures from app to camera roll. Online Safety Information online lasts for a long time.	<u>Significant People</u> Digital Literacy How to use a keyboard to type. Combine images and sentences on Purple .Mash (laptops) Online Safety What makes a good password? How to keep passwords secure.	<u>Muck, Mess and Mixtures</u> Computing Plan an algorithm . Create a simple program to achieve a purpose. Debug a program. Online Safety Communicate respectfully on line saying how your actions make somebody feel.	<u>Under the Canopy</u> Digital Literacy Animation Online Safety Know what to do if unsafe content or messages are found.	<u>Land Ahoy!</u> Digital Literacy Send email on Purple Mash. Combine images and sentences on Purple Mash (laptops). Save work and retrieve at a later point. Online Safety How to behave politely online with people I don't know (games).	<u>On the Beach</u> Computing Coding (2Code) Online Safety Explain how rules to stay safe online help me.
3	<u>Road Trip USA!</u> Computing Debug practical algorithms (sandwich bot). Code on an app using algorithms. Online Safety Discuss how our identity online can change depending on what we are doing (e.g. gaming, social media). Understand safe use of computers and how to report unacceptable content and contact online.	<u>Stone Age, Bronze Age and Iron Age</u> Digital Literacy Combine images and text on Microsoft Word/Publisher. Improve typing efficiency and speed (BBC Dance Mat Typing). How has use of technology changed over time? Online Safety Understand negative effects of excessive screen time. Understand how to communicate with respect online.	<u>Forces, Magnets and Metals</u> Digital Literacy Combine images and text on Microsoft PowerPoint Online Safety Look at different ways of reporting incidents online (trusted adults, report it buttons online)	<u>Rocks, Volcanoes and Earthquakes</u> Digital Literacy Combine video, sound and images to produce informative digital content (Shadow Puppet EDU) Online Safety Using key phrases in search engines Know the difference between a 'belief', an 'opinion' and a 'fact'	<u>Ancient Greece</u> Computing Coding Online Safety Recognise the importance of thinking about what is shared about themselves and others online Know who to ask about appropriate things to post online	<u>Scrumdiddlyumptious & Take One Author</u> Computing Use block coding to move a robot Online Safety Explain the risks of talking to unknown people online. Explain the meaning of 'trusting someone online' and how this is different from 'liking someone'.
4	<u>Roman Britain</u> Computing Use logical reasoning to predict outputs showing an awareness of inputs (Kodable, A.L.E.X, rodocado hour of code, Lightbox junior). Online Safety Understand that people online can pretend to be other people (including pretending to be a friend) and suggest why they might do this.	<u>Anglo Saxons</u> Digital Literacy Use Green screen app to create informative poster. Narrow searches using basic Boolean operators. Typing skills and speed. Online Safety Understand how using technology can be a distraction. Identify times where limiting the use of technology would help.	<u>Misty Mountains, Winding Rivers</u> Online Safety Explain why there are age restrictions on online games. Computing Use block-based coding (plugged and unplugged coding).	<u>Take One Author: Michael Morpurgo</u> Digital Literacy Understand the difference between the internet and the world wide web. Combine text, images and transitions on PowerPoint. Online Safety Describe how others can find out information about others by looking online. Explain how content shared online could have been created, copied or shared by others.	<u>Vikings</u> Digital Literacy Use 2Logo to use simple text based coding. Online Safety Explain why lots of people sharing the same beliefs or opinions online does not make those opinions or beliefs true.	<u>Living Things and their Habitats</u> Digital Literacy Combine text and images to create an informative page on Publisher. Online Safety When searching on the internet for content to use, explain why it is important to consider whether we have the right to use it. Computing Use simple text based code Use the 'repeat' command.

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5	<p><u>Marvellous Mechanisms</u> Digital Literacy Green Screen app to create advert for theme park.</p> <p>Online Safety Recognise what is acceptable and unacceptable behaviours when using technologies and online services.</p> <p>Computer Science Coding using Scratch.</p>	<p><u>The Solar System</u> Digital Literacy Combine text, images and transitions to create an informative PowerPoint.</p> <p>Online Safety Understands how to effectively use search engines and know how searches are selected.</p> <p>Use different search technologies, checking information online is honest and accurate. Understand 'being sceptical' and why this is important.</p> <p>Understand what is meant by a 'hoax'.</p>	<p><u>The Black Death</u> Computer Science Use knowledge of algorithms to create a game.</p> <p>Crazy Creatures algorithms.</p> <p>Online Safety Recognise how online identity can be copied, modified or altered.</p> <p>Demonstrate responsible choices about own online identity depending on context.</p> <p>Describe ways technology can affect sleep and strategies to improve this.</p>	<p><u>Inventions and Industry</u> Digital Literacy Create a trailer for a movie on iMovie (Animation).</p> <p>Online Safety Make positive contributions online. Describe involvement in online communities and how positive collaboration with others is achieved.</p> <p>Computer Science Recognise that different solutions exist for the same problem (Underground Algorithms).</p>	<p><u>Take One Author/Materials and their Properties</u> Digital Literacy Combine text, images and thoughtful structure on Publisher.</p> <p>Recognise audience when designing and creating content (Link to Music using 2 Sequence – Purple Mash).</p> <p>Online Safety Search for information about an individual online and create a summary report of findings.</p> <p>Describe ways that information online can be used to make judgements about an individual.</p> <p>Explain what is meant by 'data', 'information', 'fact', 'opinion', 'belief', 'true', 'false', 'valid', 'reliable' and 'evidence'.</p> <p>Computer Science Navigate rugged robots in an outdoor space giving precise instructions using degrees.</p>	<p><u>Ancient Egypt</u> Online Safety Recognise when someone is upset, hurt or angry online</p> <p>Know how to get help if someone is being bullied online</p> <p>Know how to report and block abusive users</p> <p>Computer Science Uses a 'loop' (e.g. until) and a sequence of selection statements in programs, including an 'if', 'then' and 'else' statement.</p>
6	<p><u>Darwin's Delight</u> Digital Literacy Use criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution, and future solutions.</p> <p>Online Safety Demonstrate responsible use of technologies and online services and know how to report concerns including capturing bullying content as evidence.</p> <p>Computer Science Understand the difference between appropriate uses of 'if', 'then' and 'else' statements.</p>	<p><u>World War 2</u> Digital Literacy Analyse and evaluate data and information and recognise that poor quality data leads to unreliable results and inaccurate conclusions .(Excel).</p> <p>Online Safety Understand that some online information can be opinion; give examples of these and explain why it may happen.</p> <p>Define 'influence', manipulation' and 'persuasion' and explain how I might encounter these online (advertising).</p> <p>Computer Science Designs, writes and debugs modular programs (program divided into sub-parts) using procedures.</p>	<p><u>Frozen Kingdom</u> Digital Literacy Improve word processing speed.</p> <p>Online Safety Describe ways that media can shape ideas about gender.</p> <p>Computer Science Combine a group of instructions into a single named unit (procedural abstraction) – Scratch.</p>	<p><u>Tales of Terror</u> Digital Literacy Analyse and evaluate data and information and recognise that poor quality data leads to unreliable results and inaccurate conclusions (Excel).</p> <p>Online Safety Describe common systems that regulate age-related content (PEGI, BBFC, parental warnings) and their purpose</p> <p>Know the importance of self-regulating use of technology and demonstrate own strategies for these.</p> <p>Computer Science Use loops in a coding sequence</p>	<p><u>Africa</u> Online Safety Describe how to capture bullying content as evidence (screen-grab, URL, profile) to share with someone who can help.</p> <p>Describe how to report concerns at home and in school.</p> <p>Computer Science Navigate rugged robots in an outdoor space giving precise, multi-step instructions using degrees.</p>	<p><u>Mexico and the Mayans</u> Digital Literacy Combine text, images, transitions and consideration of audience on PowerPoint</p> <p>Online Safety Understand responsibilities for the well-being of others in online social groups</p> <p>Explain how impulsive and rash communications may cause problems</p>