








Our Vineyard Computing Curriculum:

Connecting to the 'bigger picture' through our themes.



	Networks	Understand how networks can be used to retrieve and share information and come with associated risks
	Creating media	Select and create a range of media including text, images, sounds and video.
	Data and information	How data is stored, organised and used to represent real world artefacts and scenarios
	Design and development	The activities involved in planning, creating and evaluating computing artefacts
	Computer systems	What a computer is, how its constituent parts function together as a whole
	Impact of technology & Safety and security	How individuals, systems and society as a whole interact with computer systems Understanding risks when using technology and how to protect individuals and systems
	Algorithms and programming & Effective use of tools	Being able to comprehend, design, create and evaluate algorithms Creating software to allow computers to solve problems Use software tools to support computing work

The Vineyard Computing Curriculum Overview - Years Reception to 6			
	Autumn	Spring	Summer
EYFS		<p><u>Computing systems and network: Exploring hardware</u> The children will be given the opportunities for tinkering and exploring with different computer hardware and learn to operate a camera.</p>	<p><u>Programming 2: Programming Bee-Bots</u> The children will learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware</p>
Year 1	<p><u>Using a chromebook - Google Applications</u> The children will learn to log into a chromebook and use a keyboard and trackpad independently.</p>	<p><u>Skills showcase: Rocket to the moon</u> The children develop keyboard and mouse skills by designing rockets, creating digital materials lists, using drawing software and recording data.</p>	<p><u>Creating media: Digital Imagery</u> The children will use creativity and imagination to plan a miniature adventure story and capture it using developing photography skills. They will learn to enhance photos using a range of editing tools as well as searching for and adding other images to a project, resulting in a high-quality photo collage showcase.</p>
Year 2	<p><u>Capture and edit digital photographs - Pixlr</u> Children will learn how to use a digital device to take a photograph. They will understand what makes a good photograph and be able to improve the photograph using digital tools.</p>	<p><u>Stop motion – Option 1: Using tablets</u> The children will be creating simple animations, storyboarding creative ideas and decomposing a story into small parts of action.</p>	<p><u>Data handling: International Space Station</u> The children will learn how astronauts survive on the ISS, including identifying necessary items, designing sensor displays and exploring habitable planets. Children will gain an understanding of living in space and how space exploration can benefit life on Earth.</p>
Year 3	<p><u>Create an animation - Flipbook</u> Children will plan, create, improve and evaluate an animation using Flipbook.</p>	<p><u>Programming: Scratch</u> Exploring Scratch by programming an animation, the children learn key coding concepts, test and debug their work and develop their ability to improve digital projects through evaluation.</p>	<p><u>Video Trailers</u> The children will be creating book trailers.</p>
Year 4	<p><u>Recording a podcast - Bandlab</u> Children will plan, record and edit a digital recording and evaluate the editing choices they make.</p>	<p><u>Computational Thinking</u> The children will be exploring computational thinking through unplugged activities and applying these to programming.</p>	<p><u>Data Handling: Investigating Weather</u> The children will be researching and storing data using spreadsheets, designing a weather station which gathers and records data and learning how weather forecasts are made. They will use tablets or digital cameras to present a weather forecast.</p>
Year 5	<p><u>Filming using imovie - Imovie</u> Children will learn about different camera angles and shots. They will plan, record and edit a short film.</p>	<p><u>Creating a Presentation - Google Slides</u> The children will be creating a presentation about a topic of their choosing and research, formatting and presenting their Google Slides to their class.</p>	<p><u>Stop-motion Animation – Stop Motion Studio</u> The children will learn how to create animations using Stop Motion Studio.</p>
Year 6	<p><u>Create a website - Google Sites</u> Children will review existing websites, plan the features of their webpage and use google sites to develop their own website with multiple webpages .</p>	<p><u>Computing systems and networks: Bletchley Park and the history of computers</u> Exploring code-breaking at Bletchley Park, historical figures in computing, the evolution of computers, designing a computer of the future and creating an audio advert, this unit combines lessons from archived content while retaining the progression and skills previously covered.</p>	<p><u>Skills Showcase: Inventing a Product</u> The children will be designing a new electronic product and using CAD software to design appropriate housing for it. They will develop skills in website design, video editing, and persuasive language to promote their product. Included is evaluating and adapting existing code, debugging programs, and searching for accurate information online.</p>