








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 it's constituent parts function together as a whole
	Impact of technology & Safety and security	How individuals, systems and society 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		
	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
EYFS	E-Safety Smartie the Penguin; Code and Go Mice; Interactive whiteboard (mark making, change colour, add shapes, using the pen to drag shapes); Photo and video recording; Interactive play with technology - tills, calculators, phones, laptops, metal detectors, microphones		
<u>Year 1</u>	<u>Using a chromebook - Google Applications</u> The children will learn to log into a chromebook and use a keyboard and trackpad independently.	<u>Digital Writing and Drawing Paint</u> The children will focus on writing and editing sentences digitally on a chromebook. They will also create a digital art piece to support their writing.	<u>Introduction to animation - Scratch</u> The children will learn how to create and use a series of commands to program a sprite so that it moves.
<u>Year 2</u>	<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.	<u>Data & IT around us - j2E</u> Children will learn to recognise the role of IT and understand how it improves our world when used responsibly. Children will learn how to create a pictogram and present the information using a computer.	<u>Programming a Bee-bot</u> Children will learn to programme a robot so that it moves in different ways, design an algorithm and use logical reasoning to predict outcomes.
<u>Year 3</u>	<u>Create an animation - Flipbook</u> Children will plan, create, improve and evaluate an animation using Flipbook.	<u>Using branching databases - Chromebooks</u> Children will create a branching database and explain how branching databases are structured. They will develop their understanding of sequences using programming language.	<u>Program a sprite to play a piano - Scratch</u> Children will explore a programming environment and identify that commands have an outcome. They learn that a program has a start and that the sequence of commands has an order.
<u>Year 4</u>	<u>Recording a podcast - Bandlab</u> Children will plan, record and edit a digital recording and evaluate the editing choices they make.	<u>Understand systems and networks</u> Children will learn about the World Wide Web and be able to identify the function of a router, network and server.	<u>Turtle logo programming - Turtle Logo</u> Children will learn simple codes for the logo language and plan and create a wrapping paper using simple algorithms.
<u>Year 5</u>	<u>Filming using imovie - Imovie</u> Children will learn about different camera angles and shots. They will plan, record and edit a short film.	<u>Computer systems and networks</u> <u>Sharing information online</u> Children will explain how computers can be connected, recognise the role of computer systems in our lives and explain how information is shared online.	<u>Selection in quizzes - Scratch</u> Children will develop their knowledge of 'selection' by revisiting how 'conditions' can be used in programming. They learn how the 'if... then... else...' structure can be used to select different outcomes depending on whether a condition is 'true' or 'false'.
<u>Year 6</u>	<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 .	<u>Programming using variables - Scratch</u> Children will explain why a variable is used in a programme and they will design and evaluate a project that builds on a given example.	<u>Using a spreadsheet to plan a party - Google sheets</u> Children will learn about data collection and how data can support the use of calculations using sorting and filtering.