



Computing Overview

Intent: We want pupils to be **MASTERS** of technology and not slaves to it. We want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers.

Key Concepts in Computing at Emmanuel Holcombe		
Digital literacy	Information Technology	Computer Science

Computing in Acorns: Preschool and Reception

	Use of technology and Seesaw through the class to be linked in and repeated throughout the year.		
Unit			
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science
	<p>In Key stage 1 Pupils should be taught to: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>		

Year A Computing in Willow: Year 1 & 2

	Autumn	Spring	Summer
Unit	Digital literacy/ESafety (ProjectEvolve.com) <i>Video Creation</i>	Storyboard presentation Pictograms Emoji Avatars	Simple Algorithms Animated Character AI Around Us
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science

Year B Computing in Willow: Year 1 & 2

	Autumn	Spring	Summer
Unit	Digital literacy/ESafety (ProjectEvolve.com) <i>Stop Motion Animations</i>	Speech Bubble Pictures Photoshopping Venn Diagram	Knock Knock Joke AI Advantages Video
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science

In Key Stage 2 pupils should be taught to: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Year A Computing in Beech: Year 3 & 4

	Autumn	Spring	Summer
Unit	Digital literacy/ESafety (ProjectEvolve.com) Digital Self Portrait	Story Graphs Digital Comics	Exploring Data Network Explorer
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science

Year B Computing in Beech: Year 3 & 4

	Autumn	Spring	Summer
Unit	Digital literacy/ESafety Movie Soundtrack	Invent a Toy Line Draw Animation Online Questionnaire	Understanding the Internet Robot Orchestra Teachable Machine
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science

Year A Computing in Oak: Year 5 & 6

	Autumn	Spring	Summer
Unit	Digital literacy/ESafety (ProjectEvolve.com) Coding with Tinkercard Search Engines	News Report Google Sheets Animated Scene	Quiz My AI Invention Interactive Poster
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science
Year B Computing in Oak: Year 5 & 6			
	Autumn	Spring	Summer
Unit	Digital literacy/ESafety Podcasting	Interactive AR Scene Animated Cartoon Character GIF App Prototype	HTML Machine Learning for Kids Video Game
Key Concept	Digital Literacy/E-Safety	Information Technology	Computer Science