Computing at Orchard Academy – YEAR 3

Autumn Term	**Unit 3.1 - We are programmers** *The children create an animated cartoon using characters they design. They use a paint tool to create characters and backgrounds. They then create an animation by translating a storyboard into a series of scripted instructions (program) for graphic objects.* • Create an algorithm for an animated scene in the form of a storyboard • Write a program in Scratch to create the animation • Correct mistakes in their animation programs **Unit 3.2 We are bug fixers** *The children work with six example Scratch projects. They explain how the scripts work, finding and correcting errors in them, and explore creative ways of improving them. The children learn to recognise some common types of programming error, and practise solving problems through logical thinking.* • Develop a number of strategies for finding errors in programs • Build up resilience and strategies for problem solving • Increase their knowledge and understanding of Scratch • Recognise a number of common types of bug in software	Programming Technology in our Lives Programming Technology in our Lives
Spring Term	**Unit 3.3 We are presenters** *This unit gives children a chance to make a short, narrated video of themselves practising a sport or other skill, and to use this to help improve their performance.* • Gain skills in shooting live video, such as framing shots, holding the camera steady, and reviewing • Edit video, including adding narration and editing clips by setting in/out points • Understand the qualities of effective video, such as the importance of narrative, consistency, perspective and scene length **Unit 3.4 We are network engineers** *The pupils investigate how computer networks work. They use a simulation and learn some simple command prompt (C:) tools for testing network connections.* • Understand the physical hardware connections necessary for computer networks to work • Understand some features of internet protocols • Understand some diagnostic tools for investigating network connections • Develop a basic understanding of how domain names are converted to IP addresses	Multimedia Technology in our lives ICT Skills E-safety Technology in our lives ICT Skills
Summer Term	**Unit 3.5 We are communicators** *This unit allows the children to learn about a number of e-safety matters in a positive way. They will work with a partner in another class, learning how to use email and video conferencing safely* • Develop a basic understanding of how email works • Be able to use email to send a message • Be aware of broader issues surrounding email, including 'netiquette' and e-safety • Work collaboratively with a remote partner • Experience video conferencing **Unit 3.6 We are opinion pollsters** *In this unit, the children create their own opinion poll, seek responses, and then analyse the results.* • Understand some elements of survey design • Understand some ethical and legal aspects of online data collection • Use the web to facilitate data collection • Use charts to analyse data • Interpret results represented in a chart or table	E-safety Multimedia Technology in our lives Data Handling Multimedia Technology in our lives ICT Skills