

Overview of units

Unit	Learning outcomes	Computing programme of study	Software	Hardware
3.1 We are programmers Programming an animation	Pupils learn to: <ul style="list-style-type: none"> plan and create an algorithm for an animated scene in the form of a storyboard write a program in Scratch to create the animation, including characters, dialogue, costumes, backdrops and sound review their animation programs and correct mistakes. 	<ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts. Use sequence in programs; work with variables and various forms of output. Use logical reasoning to detect and correct errors in algorithms and programs. 	Main: <ul style="list-style-type: none"> Scratch Alternatives: <ul style="list-style-type: none"> ScratchJr 	<ul style="list-style-type: none"> Laptop/desktop/Chromebook computers or tablets Cameras and microphones (if needed)
3.2 We are bug fixers Finding and correcting bugs	Pupils learn to: <ul style="list-style-type: none"> 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 bugs in software. 	<ul style="list-style-type: none"> Debug programs that accomplish specific goals. 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. 	Main: <ul style="list-style-type: none"> Scratch Screen recorder software Alternatives: <ul style="list-style-type: none"> Snap! 	<ul style="list-style-type: none"> Laptop/desktop/Chromebook computers or tablets Microphones (if needed)
3.3 We are presenters Videoing a presentation against a green screen	Pupils learn to: <ul style="list-style-type: none"> develop their web-based research skills structure, prepare and deliver a talk about a given topic or subtopic studied in another curriculum area record a piece to camera edit a movie using static images and green screen footage give constructive, critical feedback on recorded presentations. 	<ul style="list-style-type: none"> 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 information. Use technology safely, respectfully and responsibly. 	Main: <ul style="list-style-type: none"> Popplet iMovie Alternatives: <ul style="list-style-type: none"> Camera app Microsoft Photos Adobe Premiere Elements 	<ul style="list-style-type: none"> iPad Green screen background Tripod and iPad mount

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3.4 We are who we are Creating presentations about ourselves	Pupils learn to: <ul style="list-style-type: none"> ● create a number of structured presentations ● narrate presentations ● consider issues of trust and privacy when sharing information. 	<ul style="list-style-type: none"> ● Select, use and combine a variety of software to design and create content that accomplishes given goals, including presenting information. ● Use technology safely, respectfully and responsibly. 	<i>Main:</i> <ul style="list-style-type: none"> ● Google Slides ● Screen recorder software <i>Alternatives:</i> <ul style="list-style-type: none"> ● Microsoft PowerPoint 	<i>Main:</i> <ul style="list-style-type: none"> ● Laptop/desktop/Chromebook computers <i>Alternatives:</i> <ul style="list-style-type: none"> ● iPads or Android tablets
3.5 We are co-authors Producing a wiki	Pupils learn to: <ul style="list-style-type: none"> ● understand the conventions for collaborative online work, particularly in wikis ● be aware of their responsibilities when editing other people's work ● become familiar with Wikipedia, including potential problems associated with its use ● practise research skills ● write for a target audience using a wiki tool ● develop collaboration skills ● develop proofreading skills. 	<ul style="list-style-type: none"> ● 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. ● Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content. 	<ul style="list-style-type: none"> ● Google Sites ● Popplet 	<i>Main:</i> <ul style="list-style-type: none"> ● Laptop/desktop computers <i>Alternatives:</i> <ul style="list-style-type: none"> ● iPads ● Chromebooks
3.6 We are opinion pollsters Collecting and analysing data	Pupils learn to: <ul style="list-style-type: none"> ● understand some elements of survey design ● understand some ethical and legal aspects of online data collection ● use the Internet to facilitate data collection ● use charts to analyse data ● interpret results. 	<ul style="list-style-type: none"> ● 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. ● 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. 	<i>Main:</i> <ul style="list-style-type: none"> ● Google Forms ● Google Sheets ● Google Slides ● Google Drive <i>Alternatives:</i> <ul style="list-style-type: none"> ● Microsoft equivalents ● j2vote, j2data and j2office 	<ul style="list-style-type: none"> ● Laptop/desktop/Chromebook computers ● iPads or Android tablets (optional)