

	Autumn Term	Spring Term	Summer Term
Year 1	<p>Aut 1 We are treasure Hunters-moving around maps Hardware/Software: Programmable Toys; Bee-Bot App; Daisy the Dinosaur. POS Understand what algorithms are; how they are implemented as programs; and that programs execute by following precise instructions. Create and debug simple programs Recognise common uses of information technology beyond school. Target Skills Control and following instructions.</p> <p>Aut 2 We are Celebrating- Creating a card electronically Hardware/software: Microsoft PowerPoint; Publisher. POS 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. Target Skills</p>	<p>Spr 1 We are storytellers- Producing a talking book Hardware/Software: Microsoft PowerPoint; Microsoft Photo Story POS Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Target Skills Sound Recording</p> <p>Spr 2 We are TV Chefs- Filming a recipe. Hardware/Software: Web browser; Microsoft Movie Maker; iMovie POS Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Target Skills Research, Video recording</p>	<p>Sum 1 We are Painters- Producing illustrations with digital media Hardware/Software: Tux Paint; Microsoft Paint; To Simple Paint POS Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Target Skills Research, graphics, Control and illustrating</p> <p>Sum 2 We are Collectors- Use search engines to find pictures of animals and find ways to display that information . Hardware/Software: Web Browser; PowerPoint POS Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Target Skills Organise and manipulate digital content.</p>

	Research, word processing, graphics.		
Year 2	<p>Aut 1 We are Astronauts- Programming on screen Hardware/Software: Scratch 2.0 POS Understand what algorithms are; how they are implemented as programs; and that programs execute by following precise instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs Target Skills Control, programming</p> <p>Aut 2 We are Games Testers- Exploring how computer games work Hardware/Software: Scratch 2.0; SNAP, in the browser. POS Describe carefully what happens in a computer game and use logical reasoning to predict about what a program will do. Understand what algorithms are; how they are implemented as programs; and that programs execute by following precise instructions. Target Skills Control, programming</p>	<p>Spr 1 We are photographers- Taking photos Editing and enhancing. Hardware/Software: Digital cameras, Picasa, Pixlr, iPhoto. POS Consider the technical and artistic merits of photographs. Use a digital camera or camera app take digital photographs. Review and reject or pick the images they take edit and enhance their photographs. Select their best images to include in a shared portfolio. Target Skills Digital photography, image management, photo editing</p> <p>Spr 2 We are researchers- Research a topic using a structured approach. Hardware/Software: Microsoft PowerPoint; Custom Google Search POS Develop research skills through searching for information on the internet. Improve note-taking skills through the use of mind mapping. Develop presentation skills through creating and delivering a short multimedia presentation. Target Skills Research, Presentation</p>	<p>Sum 1 We are Detectives- Communicating Clues Hardware/Software: Email System POS Use technology safely, respectfully, keeping personal information private. Gain skills in opening and closing audio and video files. Target Skills Email, word processing</p> <p>Sum 2 We are Zoologists- Bug Hunt Data Hardware/Software: Excel, 2Simple 2Count, RM stating graphs. POS Sort and classify y asking a range of questions, collect data using ticks or simple tally chart. Use simple graphing software to produce simple pictiograms and charts. Target skills Data Collection, Data Handling, Charts and graphs</p>

<p>Year 3</p>	<p>Aut 1 We are Programmers- Programming an animation Hardware/Software: Scratch 2.0 POS Create an algorithm for animated scene in the form of a storyboard. Write a program in scratch to create the animation Debug errors in the animation process Target Skills Programming, graphics, animations</p> <p>Aut 2 We are bug fixers- Finding and correcting bugs in programs Hardware/Software: Scratch 2.0 POS Deveolp a number of strategies to find bugs in programs Build up resilience and strategies for problem solving. Increase Knowledge and understanding of scratch Recognise a number of common type of bugs found in software. Target Skills De-Bugging, Re-programming, Control</p>	<p>Spr 1 We are presenters- Videoing performances Hardware/Software: iMovie, Windows Movie Maker, Digital cameras POS 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. Target Skills Video Editing, Framing, Control and graphics</p> <p>Spr 2 We are network engineers- Exploring computer networks including the internet. Hardware/Software: Command Prompt POS 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</p>	<p>Sum 1 We are communicators- Here and there communicating. Hardware/Software: Email, video conferencing. POS Understand computer networks including the internet, how the can provide multiple services such as the WWW and provide opportunities for communication and collaborations. Use technology safely and respectfully. Target Skills Text, email, forums, chat</p> <p>Sum 2 We are opinion Pollsters- Opinion Polling Hardware/Software: Survey Monkey, excel, Google Docs. POS Communication and collaboration. Use a variety of software including collecting, analysing evaluating and presenting data. Target Skills: Research, survey creators, data analysis and charts</p>

	<p>Target Skills: Control, programming, debugging</p>	<p>risks in using the web.</p> <p>Target skills: Research, collaboration, web design</p>	<p>the given goals</p> <p>Target Skills: Data logging, data analysis, presentation, video recording, green screening.</p>
<p>Year 5</p>	<p>Aut 1 We are Games Developers- Deveolping an interactive game Hardware/Software: Scratch 2.0</p> <p>POS Create original artwork and sound for a game design and create a computer program for a computer game, which uses sequence, selection, repetition and variables; detect and correct errors in their computer game use iterative development techniques (making and testing a series of small changes) to improve their game.</p> <p>Target skills: Programming and graphics</p> <p>Aut 2 We are Cryptographers - Cracking Codes Hardware/software: Scratch 2.0; the Black Chamber Website</p> <p>POS Be familiar with semaphore and Morse</p>	<p>Spr 1 We are Artists- Fusing Geometry and Art Hardware/Software: Inkscape; Adobe illustrator; Scratch 2.0</p> <p>POS Be discerning in evaluation digital content, Select, se and combine a varity of software on a range of hardware devices</p> <p>Target skills Vector graphics; programming</p> <p>Spr 2 We are Web developers- Creating a website about Cyber Saftey Hardware/Software: Google, Bing, WikiTools</p> <p>POS develop their research skills to decide what information is appropriate; understand some elements of how search engines select and rank results; question the plausibility and quality of information; develop and refine</p>	<p>Sum 1 We are Bloggers- Media Reviews Hardware/Software: Wordpress, Blogger</p> <p>POS become familiar with blogs as a medium and a genre of writing create a sequence of blog posts on a theme incorporate additional media comment on the posts of others develop a critical, reflective view of a range of media, including text.</p> <p>Target skills text and other media; writing for an audience.</p> <p>Sum 2 We are architects- Creating a virtual space Hardware/Software: Trimble Sketch Up</p> <p>POS Understand the work of architects, designers and engineers working in 3D; develop familiarity with a simple CAD (computer- aided design) tool; develop spatial awareness by exploring and</p>

	<p>code, understand the need for private information to be encrypted, encrypt and decrypt messages in simple ciphers, appreciate the need to use complex passwords and to keep them secure; have some understanding of how encryption works on the web.</p> <p>Target skills</p> <p>Programming, reading and assessing information</p>	<p>their ideas and text; collaboratively develop their understanding of e-safety and responsible use of technology.</p> <p>Target Skills</p> <p>Research, Collaboration, web design</p>	<p>experimenting with a 3D virtual environment; develop greater aesthetic awareness.</p> <p>Target skills:</p> <p>Research, 3D Modeling, image management</p>
Year 6	<p>Aut 1</p> <p>We are App Planners- Planning the creation of a mobile app</p> <p>Hardware/Software:</p> <p>App inventor; Picasa Web POS</p> <p>Develop an awareness of the capabilities of smartphones and tablets; understand geolocation, including GPS; identify interesting, solvable problems; evaluate competing products; pitch a proposal for a smartphone or tablet app.</p> <p>Target Skills</p> <p>Programming and graphics</p>	<p>Spr 1</p> <p>We are market researcher- researching apps</p> <p>Hardware/software:</p> <p>Google Drive; Microsoft office POS</p> <p>Create a set of good survey questions; analyse the data obtained from a survey work collaboratively to plan questions conduct an interview or focus group analyse and interpret the information obtained from interviews or a focus group present their research findings.</p> <p>Target skills:</p> <p>collaboration; team work, word processing</p>	<p>Sum 1</p> <p>We are App developers- developing a mobile app.</p> <p>Hardware/software:</p> <p>App inventor; touch developer. POS</p> <p>Become familiar with another programming toolkit or development platform import existing media assets to their project; write down the algorithms for their app program, debug and refine the code for their app; thoroughly test and evaluate their app.</p> <p>Target Skills</p> <p>Programming and graphics</p>

Aut 2

We are Project Managers- Developing project manager skills

Hardware/Software: VLE; Github; Basecamp

POS

Cope a project to identify different components that must be successfully combined identify their existing talents and plan how they can develop further knowledge and skills; identify the component tasks of a project and develop a timeline to track progress; identify the resources they'll need to accomplish a project; use web-based research skills to source tools, content and other resources consider strategies to ensure the quality of a collaborative project.

Target skills

Organising, developing, collaboation

Spr 2

We are interface designers- Design an interface for an app.

Hardware/software: PowerPoint, Justinmind Prototyper

POS

Work collaboratively to design the app's interface use wire; framing tools to create a design prototype of their app; develop or source the individual interface components (media assets) they will use address accessibility and inclusion issues; document their design decisions and the process they've followed.

Target skills

Programming and graphics

Sum 2

We are Marketers- Creating video for a mobile app.

Hardware/software:

Movie Maker, iMovie

POS

Consider key marketing messages, including identifying a unique selling point; develop a printed flyer or brochure incorporating text and images; further develop knowledge, skills and understanding in relation to creating a website; further develop skills relating to shooting and editing video.

Target skills

Programming, video editing, collaboration