

Overview of units

Unit	Expectations	Computing PoS	Software/Apps	Hardware
1.1 We are treasure hunters Using programmable toys	<ul style="list-style-type: none"> Understand that a programmable toy can be controlled by inputting a sequence of instructions. Develop and record sequences of instructions as an algorithm. Program the toy to follow their algorithm. Debug their programs. Predict how their programs will work. 	<ul style="list-style-type: none"> 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. Recognise common uses of information technology beyond school. 	Software: Programming interface for programmable toy Scratch Bee-Bot simulator Apps: Bee-Bot app; Daisy the Dinosaur; Blue-Bot app,	Programmable toy, such as a Bee-Bot or Roamer Too. Audio recorders are needed for the first step (your phone may be sufficient)
1.2 We are TV chefs Filming the steps of a recipe	<ul style="list-style-type: none"> Break down a process into simple, clear steps, as in an algorithm. Use different features of a video camera. Use a video camera to capture moving images. Develop collaboration skills. Discuss their work and think about how it could be improved. 	<ul style="list-style-type: none"> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Use logical reasoning to predict the behaviour of simple programs. 	Software: Microsoft Paint, Microsoft Windows Live Movie Maker®/iMovie for OS X Apps: Brushes Redux, iMovie	Computers, cameras with movie mode/tablets
1.3 We are painters Illustrating an eBook	<ul style="list-style-type: none"> Use the web safely to find ideas for an illustration. Select and use appropriate painting tools to create and change images on the computer. Understand how this use of ICT differs from using paint and paper. Create an illustration for a particular purpose. Know how to save, retrieve and change their work. Reflect on their work and act on feedback received. 	<ul style="list-style-type: none"> 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. 	Software: Tux Paint/ Microsoft Paint/2Simple 2Paint A Picture/Fresh Paint, IWB software, Microsoft Word®, Microsoft PowerPoint® Apps: Brushes Redux, SketchBook Express, Fresh Paint	Laptop/desktop computers or tablets

1.4 We are collectors Finding images using the web	<ul style="list-style-type: none"> • Find and use pictures on the web. • Know what to do if they encounter pictures that cause concern. • Group images on the basis of a binary (yes/no) question. • Organise images into more than two groups according to clear rules. • Sort (order) images according to some criteria. • Ask and answer binary (yes/no) questions about their images. 	<ul style="list-style-type: none"> • Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. • Use technology purposefully to create, organise, store, manipulate and retrieve digital content. • 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. • Recognise common uses of information technology beyond school. 	Software: Web browser, Microsoft PowerPoint® or IWB Software Apps: Web browser, Keynote or Explain Everything	Internet connection, laptop/desktop computers
1.5 We are storytellers Producing a talking book	<ul style="list-style-type: none"> • Use sound recording equipment to record sounds. • Develop skills in saving and storing sounds on the computer. • Develop collaboration skills as they work together in a group. • Understand how a talking book differs from a paper-based book. • Talk about and reflect on their use of ICT. • Share recordings with an audience. 	<ul style="list-style-type: none"> • 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 ... 	Software: Microsoft PowerPoint®/2Create A Story/IWB software Apps: Keynote/Explain Everything/Book Creator	Computers/tablets, MP3 recorders/microphones
1.6 We are celebrating Creating a card digitally	<ul style="list-style-type: none"> • Develop basic keyboard skills, through typing and formatting text. • Develop basic mouse skills. • Use the web to find and select images. • Develop skills in storing and retrieving files. • Develop skills in combining text and images. • Discuss their work and think about whether it could be improved. 	<ul style="list-style-type: none"> • 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. 	Software: Microsoft PowerPoint®/Microsoft Word®/Clicker 7 Apps: Pages/Keynote, Brushes Redux/Sketchbook Express	Laptops/computers/tablets, printer