

## Overview of units

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

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