

Year 2			
<u>Skills</u>	<u>National Curriculum</u>	<u>Key knowledge</u>	<u>Key Vocabulary</u>
<b>Computer systems and networks (1 and 2)</b>	<b>Computer systems and networks (1 and 2)</b>	<b>Computer systems and networks (1 and 2)</b>	<b>Computer systems and networks (1 and 2)</b>
<p>Understanding what a computer is and that it's made up of different components. (CS) 1</p> <p>Recognising that buttons cause effects, and that technology follows instructions. (CS) 1</p> <p>Learning how we know that technology is doing what we want it to do via its output. (CS) 1</p> <p>Using greater control when taking photos with cameras, tablets or computers. (CS) 1</p> <p>Developing confidence with the keyboard and the basics of touch typing (CS) 2</p> <p>Developing word processing skills. (IT) 1 and 2</p> <p>Using word processing software to type and reformat text. (IT) 1 and 2</p> <p>Creating and labelling images. (IT) 1</p> <p>Searching for appropriate images to use in a document. (IT) 2</p> <p>Understanding what online information is. (IT) 2</p> <p>Learning how computers are used in the wider world. (IT) 1</p> <p>Identifying whether information is safe or unsafe to be shared online. (DL) 2</p>	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS) 1</p> <p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (DL) 2</p> <p>Recognise common uses of information technology beyond school. (IT) 1</p> <p>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. (DL) 2</p>	<p>To know the difference between a desktop and laptop computer.</p> <p>To know that people control technology.</p> <p>To know that buttons are a form of input that give a computer an instruction about what to do (output).</p> <p>To know that computers often work together.</p> <p>To know that touch typing is the fastest way to type.</p> <p>To know that I can make text a different style, size and colour.</p> <p>To know that "copy and paste" is a quick way of duplicating text.</p>	<p>Battery</p> <p>Camera</p> <p>Computer</p> <p>Desktop</p> <p>Device</p> <p>Digital</p> <p>Function</p> <p>Input</p> <p>Keyboard</p> <p>Monitor</p> <p>Output</p> <p>System</p> <p>Navigate</p> <p>Touch typing</p> <p>Word processing</p>
<b>Programming (1 and 2)</b>	<b>Programming (1 and 2)</b>	<b>Programming (1 and 2)</b>	<b>Programming (1 and 2)</b>

<p>Recognising that buttons cause effects and that technology follows instructions. (CS) 2</p> <p>Developing confidence with the keyboard and the basics of touch typing. (CS) 1</p> <p>Articulating what decomposition is. (CS) 1</p> <p>Decomposing a game to predict the algorithms used to create it. (CS) 1</p> <p>Learning that there are different levels of abstraction. (CS) 1</p> <p>Explaining what an algorithm is. (CS) 1 and 2</p> <p>Following an algorithm. (CS) 1 and 2</p> <p>Creating a clear and precise algorithm. (CS) 1 and 2</p> <p>Learning that programs execute by following precise instructions. (CS) 1 and 2</p> <p>Incorporating loops within algorithms. (CS) 1 and 2</p> <p>Using logical thinking to explore software, predicting, testing and explaining what it does. (CS) 1 and 2</p> <p>Using an algorithm to write a basic computer program. (CS) 1 and 2</p> <p>Using loop blocks when programming to repeat an instruction more than once. (CS) 2</p> <p>Developing word processing skills. (IT) 1</p> <p>Using software (and unplugged means) to create story animations. (IT) 2</p>	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS) 1 and 2</p> <p>Create and debug simple programs. (CS) 1 and 2</p> <p>Use logical reasoning to predict the behaviour of simple programs. (CS) 1 and 2</p> <p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (DL) 1</p>	<p>To understand what machine learning is and how that enables computers to make predictions.</p> <p>To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times.</p> <p>To know that abstraction is the removing of unnecessary detail to help solve a problem.</p> <p>To know that coding is writing in a special language so that the computer understands what to do.</p> <p>To understand that the character in ScratchJr is controlled by the programming blocks.</p> <p>To know that you can write a program to create a musical instrument or tell a joke.</p>	<p>Abstraction</p> <p>Algorithm</p> <p>Artificial intelligence</p> <p>Bug</p> <p>Data</p> <p>Debug</p> <p>Decompose</p> <p>Error</p> <p>Loop</p> <p>CGI, Computer code</p> <p>Icon</p> <p>Programming</p> <p>Scratch JR</p> <p>Sequence</p>
<b>Creating media</b>	<b>Creating media</b>	<b>Creating media</b>	<b>Creating media</b>
<p>Using greater control when taking photos with cameras, tablets or computers. (CS)</p> <p>Using logical thinking to explore software, predicting, testing and explaining what it does. (CS)</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (DL)</p> <p>Recognise common uses of information technology beyond school. (IT)</p>	<p>To understand that an animation is made up of a sequence of photographs.</p>	<p>Animation</p> <p>Animator</p> <p>Background</p> <p>Digital device</p> <p>Frames</p> <p>Still images</p>

Using software (and unplugged means) to create story animations. (IT)		<p>To know that small changes in my frames will create a smoother looking animation.</p> <p>To understand what software creates simple animations and some of its features e.g. onion skinning.</p>	
<b>Data Handling</b>	<b>Data Handling</b>	<b>Data Handling</b>	<b>Data Handling</b>
<p>Developing confidence with the keyboard and the basics of touch typing. (CS)</p> <p>Creating and labelling images. (IT)</p> <p>Collecting and inputting data into a spreadsheet. (IT)</p> <p>Interpreting data from a spreadsheet. (IT)</p> <p>Learning how computers are used in the wider world. (IT)</p>	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)</p> <p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (DL)</p>	<p>To understand that you can enter simple data into a spreadsheet.</p> <p>To understand what steps you need to take to create an algorithm.</p> <p>To know what data to use to answer certain questions.</p> <p>To know that computers can be used to monitor supplies.</p>	<p>Algorithm</p> <p>Data</p> <p>Digital</p> <p>Digital content</p> <p>Experiment</p> <p>Interpret</p> <p>Monitor</p> <p>Sensor</p>