

Year 1			
<u>Skills</u>	<u>National Curriculum</u>	<u>Key knowledge</u>	<u>Key vocabulary</u>
Computer systems and networks	Computer systems and networks	Computer systems and networks	Computer systems and networks
<p>Learning where keys are located on the keyboard. (Computer science).</p> <p>Learning how to explore and tinker with hardware (CS).</p> <p>Using a basic range of tools within graphic editing software. (Information technology).</p> <p>Developing control of the mouse through dragging, clicking and resizing of images to create different effects. (IT)</p> <p>Developing understanding of different software tools.(IT)</p> <p>Recognising devices that are connected to the internet. (IT)</p> <p>Logging in and out and saving work on their own account. (Digital Literacy).</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>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)</p>	<p>To know that "log in and log out" means to begin and end a connection with a computer.</p> <p>To know that a computer and mouse can be used to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art.</p> <p>To know that passwords are important for security.</p> <p>To know that when we create something on a computer it can be more easily saved and shared than a paper version.</p> <p>To know some of the simple graphic design features of a piece of online software.</p>	<p>Software</p> <p>Computer</p>
Programming (1 and 2)	Programming (1 and 2)	Programming (1 and 2)	Programming (1 and 2)
<p>Recognising that some devices are input devices and others are output devices (CS). 1</p> <p>Learning how to explore and tinker with hardware. (CS) 2</p> <p>Learning how to operate a camera to take photos and videos. (CS) 2</p> <p>Using decomposition to solve unplugged challenges. (CS). 1 and 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>To understand that an algorithm is when instructions are put in an exact order.</p> <p>To know that input devices get information into a computer and that output devices get information out of a computer.</p> <p>To understand that decomposition means breaking a problem into manageable chunks and that it is important in computing.</p>	<p>Algorithm</p> <p>Bug</p> <p>Code</p> <p>Debug</p> <p>Decompose</p> <p>Decomposition</p> <p>Device</p> <p>Input</p> <p>Output</p> <p>Programming</p> <p>Sensor</p>

<p>Developing the skills associated with sequencing in unplugged activities. (CS). 1 and 2</p> <p>Using logical reasoning to predict the behaviour of simple programs. (CS). 2</p> <p>Following a basic set of instructions. (CS) 1 and 2</p> <p>Assembling instructions into a simple algorithm. (CS)1 and 2</p> <p>Learning to debug instructions when things go wrong. (CS) 1 and 2</p> <p>Taking and editing photographs. (IT) 2</p>	<p>Use logical reasoning to predict the behaviour of simple programs. (CS) 2</p>	<p>To know that we call errors in an algorithm 'bugs' and fixing these 'debugging'.</p> <p>To understand the basic functions of a Bee-Bot.</p> <p>To know that you can use a camera/tablet to make simple videos. To know that algorithms move a bee-bot accurately.</p>	
Creating media	Creating media	Creating media	Creating media
<p>Learning how to explore and tinker with hardware. (CS)</p> <p>Learning where keys are located on the keyboard. (CS)</p> <p>Learning how to operate a camera to take photos and videos. (CS)</p> <p>Developing the skills associated with sequencing in unplugged activities. (CS)</p> <p>Using a basic range of tools within graphic editing software. (IT)</p> <p>Taking and editing photographs. (IT)</p> <p>Developing control of the mouse. (IT)</p> <p>Developing understanding of different software tools. (IT)</p> <p>Searching and downloading images from the internet safely. (IT)</p> <p>When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable. (DL)</p>	<p>Use logical reasoning to predict the behaviour of simple programs. (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>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)</p>	<p>To understand that holding the camera still and considering angles and light are important to take good pictures.</p> <p>To know that you can edit, crop and filter photographs.</p> <p>To know how to search safely for images online.</p>	<p>Camera Device Download Software Image Import Internet Search engine Storage space Visual effects</p>
Data Handling	Data Handling	Data Handling	Data Handling

<p>Learning how to explore and tinker with hardware. (CS)</p> <p>Recognising that some devices are input devices and others are output devices. (CS)</p> <p>Learning where keys are located on the keyboard. (CS)</p> <p>Developing control of the mouse. (IT)</p> <p>Developing understanding of different software tools. (IT)</p> <p>Recognising devices that are connected to the internet. (IT)</p> <p>Understanding that technology can be used to represent data. (IT)</p> <p>Using data representations to answer questions about data. (IT)</p> <p>Using software to explore and create pictograms and branching databases. (IT)</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 know how that charts and pictograms can be created using a computer.</p> <p>To understand that a branching database is a way of classifying a group of objects.</p> <p>To know that computers understand different types of 'input'.</p>	<p>Bar chart</p> <p>Block graph</p> <p>Branching database</p> <p>Categorise</p> <p>Data record</p> <p>Data representation</p> <p>Line graph</p> <p>Information Pictogram</p> <p>Pie chart</p> <p>Tally</p> <p>Values</p>
Skills showcase	Skills showcase	Skills showcase	Skills showcase
<p>Learning where keys are located on the keyboard. (CS)</p> <p>Learning how to operate a camera to take photos and videos. (CS)</p> <p>Using logical reasoning to predict the behaviour of simple programs. (CS)</p> <p>Developing the skills associated with sequencing in unplugged activities. (CS)</p> <p>Following a basic set of instructions. (CS)</p> <p>Assembling instructions into a simple algorithm. (CS)</p> <p>Learning to debug instructions when things go wrong. (CS)</p> <p>Learning to debug an algorithm in an unplugged scenario. (CS)</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content. (DL)</p>	<p>To recognise that digital content can be represented in many forms.</p> <p>To create a digital image using a graphics editor.</p> <p>Use a basic range of tools on graphics editing software to design a rocket.</p> <p>Sequence instructions.</p> <p>Input data about their rockets into a table or spreadsheet.</p>	<p>Annotate</p> <p>Cells</p> <p>Components</p> <p>Data</p> <p>Debug</p> <p>Designing</p> <p>Digital content</p> <p>Digital image</p> <p>Document</p> <p>E-document</p> <p>Program</p> <p>Evaluate</p> <p>Input Instructions</p> <p>Sequence Software</p> <p>Spreadsheet</p>

Using a basic range of tools within graphic editing software. (IT)			
Taking and editing photographs. (IT)			
Developing control of the mouse. (IT)			
Developing understanding of different software tools. (IT)			
Recognising devices that are connected to the internet. (IT)			
Understanding that technology can be used to represent data. (IT)			
Logging in and out and saving work on their own account. (DL)			