


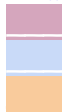




## Overview Computing Year 1

	-Computational Thinking		-Digital Literacy and Online Safety		-Computers and Hardware	
	Autumn Term		Spring Term		Summer Term	
Big Question	What makes people special?		Where in the world am I?		Is it time for a Summer Holiday?	
Other Subject links	Explorers, special places to me, DT , materials, Seasonal Change		Local areas, climate zones, animals & their habitats, DT Moving pictures, Seasonal Change		Grace Darling, Seaside Past/Present, Weather, Plants, Seasonal Change	
	Autumn 1 - <b>Improving Skills</b> 	Autumn 2 - <b>Algorithms Unplugged</b> 	Spring 1 - <b>Programming: Beebots</b> 	Spring 2 - <b>Digital Imagery</b> 	Summer 1 - <b>Introduction to Data</b> 	Summer 2 - <b>Rocket to the Moon</b> 
National Curriculum	<ul style="list-style-type: none"> <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> <li>- Use technology purposefully to create, organise, store, manipulate and retrieve digital content</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> </ul>		<ul style="list-style-type: none"> <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>- Use logical reasoning to predict the behaviour of simple programmes.</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> </ul>	
Knowledge	<b>Know</b> how to log in and log out of a computer. <b>Know</b> how to save work on their account.		<b>Know</b> what to do if they come across something online that worries them or makes them feel uncomfortable.		<b>Explain</b> the importance of a password.	
	<b>Know</b> what to do if they come across something online that worries them or makes them feel uncomfortable.		<b>Know</b> what to do if they come across something online that worries them or makes them feel uncomfortable.		<b>Know</b> how to search and download images from the internet safely.	

	<p><b>Know</b> how to use simple keywords in search engines</p>	<p><b>Know</b> that decomposition means breaking a problem down into smaller parts.  <b>Know</b> that an algorithm is a set of step-by-step instructions used to carry out a task in a specific order.  <b>Know</b> that we can predict the behaviour of simple programs.  <b>Know</b> how to follow a basic set of instructions (digital and unplugged).  <b>Know</b> how to debug an algorithm in an unplugged scenario.  <b>Know</b> how to program a Bee-bot to follow a planned route.</p>	<p><b>Know</b> that decomposition means breaking a problem down into smaller parts.  <b>Know</b> that an algorithm is a set of step-by-step instructions used to carry out a task in a specific order.  <b>Know</b> that we can predict the behaviour of simple programs.  <b>Know</b> how to follow a basic set of instructions (digital and unplugged).  <b>Know</b> how to debug an algorithm in an unplugged scenario.  <b>Know</b> how to program a Bee-bot to follow a planned route.</p>	<p><b>Explain</b> why it is important to be considerate and kind to people online.  <b>Identify</b> some inputs and outputs of computers and devices.  <b>Know</b> where keys are located on a keyboard.  <b>Explain</b> that we can control a mouse to drag, click and resize images.  <b>Know</b> how to switch on and operate a camera to take and edit photos.  <b>Know</b> how to use online paint tools to create digital art.  <b>Identify</b> where digital content can have advantages over paper when storing data.  <b>Know</b> some uses of technology beyond that used in school.</p>	<p><b>Know</b> how to use online paint tools to create digital art.  <b>Know</b> how to represent data in tables, charts and pictograms</p>	<p><b>Know</b> how to use online paint tools to create digital art.  <b>Know</b> how to represent data in tables, charts and pictograms</p>
<p><b>Skills</b>  <b>Online Safety</b></p>	<p><u>Online Safety</u></p> <p>a) I can word process ideas using a keyboard.  b) I can use the spacebar, backspace, enter, shift and arrow keys.</p>	<p><u>Online Safety</u></p> <p>a) I can create a simple series of instructions - left and right.  b) I can record my routes.  c) I understand forwards, backwards, up and down.  d) I can put two instructions together.</p>	<p><u>Online Safety</u></p> <p>a) I can create a simple series of instructions - left and right.  b) I can record my routes.  c) I understand forwards, backwards, up and down.  d) I can put two instructions together.</p>	<p><u>Online Safety</u></p> <p>a) I can capture images with a camera.  b) I can print out a photograph from a camera with help.  c) I can record a sound and play it back.</p>	<p><u>Online Safety</u></p> <p>a) I can enter information into a template to make a graph.  b) I can talk about the results shown on a graph.</p>	<p><u>Online Safety</u></p> <p>a) I can capture images with a camera.  b) I can print out a photograph from a camera with help.  c) I can record a sound and play it back.</p>
<p><b>Vocabulary</b></p>	<p>Account, clipart, log on, log off, mouse, password, tool, username, folder,</p>	<p>Algorithm, bug, computer, debug, decompose, input, output, instructions,</p>	<p>Algorithm, bug, computer, debug, decompose, input, output, instructions,</p>	<p>Camera, crop, delete, download, screen, drag and drop, editing, import, photograph, resize, save</p>	<p>Branching database, categorise, chart, computer, data, information,</p>	<p>Computer, computer program, create, data, digital</p>

	save, share, identity, rules, personal information.	solution, Bee-bot, computing code, computer program (app), predict, tinker.	solution, Bee-bot, computing code, computer program (app), predict, tinker.		label, pictogram, record, sort, table, text, password	content, e-document, folder, list, save, sequence, share, spreadsheet, search engine.
Computer program/s and/or devices needed	Mirrors iPads/Computers	Bee-Bots		iPads/Cameras	j2E Data	