



	<b>EYFS</b>	Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.		
<b>Computer Science</b>	<b>Year 1/2</b>	<b>Year 3/4</b>		<b>Year 5/6</b>
	<p>Pupils should be taught to:</p> <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 use logical reasoning to predict the behaviour of simple programs</li> <li>recognise common uses of information</li> <li>technology beyond school</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>design write and debug programs that accomplish specific goals,.....solve problems by decomposing them in smaller parts</li> <li>use sequence, selection and repetition in programs use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>recognise common uses of information technology beyond school</li> </ul>		<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals; including controlling or simulating physical systems and solving problems by decomposing them into smaller parts</li> <li>use sequence, selection and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration</li> </ul>
	<p><b>Year 1</b></p> <ul style="list-style-type: none"> <li>I can create a series of instructions.</li> <li>I can plan a journey for a programmable toy.</li> </ul>	<p><b>Year 3</b></p> <ul style="list-style-type: none"> <li>I can design a sequence of instructions, including directional instructions.</li> <li>I can write programs that accomplish</li> </ul>		<p><b>Year 5</b></p> <ul style="list-style-type: none"> <li>I can combine sequences of instructions and procedures to turn devices on and off.</li> <li>I can use technology to control an external device.</li> <li>I can design algorithms that use repetition &amp; 2-way selection.</li> </ul>



## Progression in Computing

### **Year 2**

- I can use a range of instructions(e.g. direction, angles, turns).
- I can test and amend a set of instructions.
- I can find errors and amend. (debug)
- I can write a simple program and test it.
- I can predict what the outcome of a simple program will be (logical reasoning).
- I understand that algorithms are used on digital devices.
- I understand that programs require precise instructions.

### **Year 4**

- I can experiment with variables to control models.
- I can give an on-screen robot specific instructions that takes them from A to B.
- I can make an accurate prediction and explain why I believe something will happen (linked to programming).
- I can de-bug a program.

### **Year 6**

- I can design a solution by breaking a problem up.
- I recognize that different solutions can exist for the same problem.
- I can use logical reasoning to detect errors in algorithms.
- I can use selection in programs.
- I can work with variables.
- I can explain how an algorithm works.
- I can explore 'what if' questions by planning different scenarios for controlled devices.



# Progression in Computing

## Digital Literacy

<p>Pupils should be taught to:</p> <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 on the internet or other online technologies</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</li> </ul>
<p><b>Year 1</b></p> <ul style="list-style-type: none"> <li>I can use technology safely.</li> <li>I can keep personal information private.</li> </ul> <p><b>Year 2</b></p> <ul style="list-style-type: none"> <li>I use technology respectfully.</li> <li>I know where to go for help if I am concerned.</li> <li>I know how technology is used in school and outside of school.</li> </ul>	<p><b>Year 3</b></p> <ul style="list-style-type: none"> <li>I use technology respectfully and responsibly.</li> <li>I know different ways I can get help if I am concerned.</li> <li>I understand what computer networks do and how they provide multiple services.</li> <li>I can discern where it is best to use technology and where it adds little or no value.</li> </ul> <p><b>Year 4</b></p> <ul style="list-style-type: none"> <li>I recognise acceptable and unacceptable behaviour using technology.</li> </ul>	<p><b>Year 5</b></p> <ul style="list-style-type: none"> <li>I understand that you have to make choices when using technology and that not everything is true and/or safe.</li> </ul> <p><b>Year 6</b></p> <ul style="list-style-type: none"> <li>I can discuss the risks of online use of technology.</li> <li>I can identify how to minimize risks.</li> </ul>
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>



## Progression in Computing

### Year 1

- I can identify and find keys on a keyboard
- I can enter text into a computer
- I can select text on a computer
- I can use bold, italic and underlined
- I can make marks on a screen using digital apps
- I can use a website
- I can use paint tools to create a picture
- I can create, store and retrieve digital content
- I can appropriately change the colour of a picture
- I can choose appropriate paint tools

### Year 2

- I can capture digital photographs
- I can experiment with different light sources
- I can use tools to achieve a desired effect
- I can organise digital content
- I can navigate the web to complete simple searches
- I can connect images with sounds
- I can use a computer to experiment with pitch and duration
- I can save my work

### Year 3

- I can use a range of software for similar purposes.
- I can collect information.
- I can design and create content.
- I can present information.
- I can search for information on the web in different ways.
- I can manipulate and improve digital images
- I can create effective animations
- I can add other medias to my animations

### Year 4

- I can select and use software to accomplish given goals.
- I can collect and present data.
- I can identify the inputs and outputs required to play audio or record sound
- I can use a device to record audio and play back sound
- I can plan and write the content for a podcast
- I can save a digital recording as a file and open it
- I can edit sections of an audio recording
- I can change the composition of an image by selecting parts of it
- I can retouch an image

### Year 5

- I can analyse information.
- I can evaluate information.
- I understand how search results are selected and ranked.
- I can identify and use drawing tools
- I can use the zoom tool to help me add detail to my drawings
- I can use visual media formats
- I can experiment with different camera angles
- I can capture video using a range of filming techniques
- I can make edits to a video by selecting the correct tools

### Year 6

- I can select, use and combine software on a range of digital devices.
- I can use a range of technology for a specific project.
- I can select, move, and delete a digital 3D shape
- I can make changes to a digital 3D shape in relation to size and position
- I can select appropriate 3D shapes to make a model
- I know that websites are written in HTML
- I can draw a web page layout to suit a given purpose
- I can use hyperlinks