

Computing Pathway



| | Nursery | Reception | Rec/Y1 | Year1/2 | Year 2 | Expectation |
|-------------------------|---|--|--|--|---|--|
| Using Technology | <p>To find out about technology</p> <p>To recognise some technology that is used in places such as homes and schools</p> <p>To use technology appropriately through role-play</p> | <p>To recognise and name a range of technology that is used in places such as homes, schools and places of work</p> <p>To select and use technology for a particular purpose</p> <p>To access and use simple activities using touch technology with increasing control</p> | <p>To use the keyboard to write my name with a capital letter</p> <p>Do I know that there is a wide range of technology and name some equipment</p> <p>To use a range of different technology and talk about its use</p> <p>To use keyboard skills to type a simple username into a given program</p> <p>To safely use technology by opening and closing a piece of equipment safely</p> | <p>To discuss and talk about control technology and new technologies and understand how to use them</p> <p>To select the appropriate program by finding and retrieval through the school network</p> <p>To use keyboard skills to type a simple username and password into a given program</p> <p>To save work to a folder and retrieve it when needed</p> <p>To begin to understand how to edit and copy information using a variety of media</p> | <p>To use of a wide range of technology and can describe how it works in a variety of different contexts</p> <p>To select the appropriate piece of technology for a particular purpose and communicate this</p> <p>To save work to a folder and retrieve it when needed</p> <p>To understand how to edit and copy information using a variety of media</p> <p>To film short scenes & edit with others</p> | <p>Pupils should be taught to: Recognise common uses of information technology beyond school</p> |

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| <p>Computer Science</p> | <p>To make a beebot move forwards and backwards</p> <p>To follow positional language command instructions in small world role-play (forwards, backwards, stop, start)</p> | <p>To use a range of control toys and devices</p> <p>To make a beebot move forwards, backwards and left/right</p> <p>To use positional language in role-play scenarios (forwards, backwards, stop; start, under, over, above, in-between)</p> | <p>To understand that computers and technology can be used to represent and model situations</p> <p>To explore outcomes when individual buttons are pressed on robots, such as beebots and combine these together to draw simple shapes or follow a route or instruction</p> | <p>To begin to develop computational thinking by following instructions to move around a course and create a series of instructions for others to follow</p> <p>To continue to explore beebots, combining sequences of instructions to follow a pattern or create a shape</p> <p>Do I know that commands affect algorithms</p> <p>To explore a simulation to support a given topic and talk about what happens and why</p> <p>To talk about debugging</p> <p>To correct errors in an algorithm and 'debug'</p> | <p>To explore an on screen object and navigate it around a course or grid and/or draw shapes by inputting a sequence of instructions</p> <p>To begin to understand that the on screen object can be directed through the use of text</p> <p>To enter information into a basic computer simulation, explore the effects of changing the variables in simulations, and discuss the benefits of using these simulations</p> <p>To discuss my use of simulations and compare with reality</p> <p>Can understand and create an algorithm</p> | <p>Pupils should be taught to: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs and use logical reasoning to predict the behaviour of simple programs</p> |
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| | | | | <p>To talk about what coding means in computing</p> <p>To create a list of instructions for a daily routine</p> | <p>To create a simple computer program using simple algorithms</p> <p>To debug a simple algorithm</p> <p>To debug simple programs</p> <p>To predict what objects in programs will do based on their knowledge of what objects are capable of</p> <p>To plan and use algorithms in programs successfully to achieve a desired result</p> | |
| <p>Information Technology</p> | <p>To collect and discuss data as a class</p> | <p>To insert data into a pictogram, as a class</p> <p>To answer simple questions relating to the pictogram as a class</p> | <p>To enter information into a template to make a graph and pictogram</p> <p>To answer questions relating to a graph and pictogram</p> | <p>To enter information into a template to make a graph</p> <p>To answer questions relating to a graph</p> <p>To produce simple graphs using ICT</p> | <p>To present data in different ways</p> <p>To use a branching database to answer questions</p> <p>To amend teacher prepared graphs</p> | <p>Pupils should be taught to: Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> |

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| | | | | To navigate around a spreadsheet | | |
| Online Safety | <p>To speak to an adult about what they have seen</p> <p>To ask a grown up before using a digital device at school</p> | <p>To talk about what I am doing on a computer/ digital device</p> <p>To say if something I find on the internet makes me feel bad</p> <p>To speak to an adult about what I have seen</p> <p>To follow the school's safer internet rules</p> <p>To say what I need to do if I am unsure when using a computer</p> <p>To talk about not sharing my passwords</p> <p>To ask for permission to take a photograph of someone else</p> | <p>Do I know how to act if I find inappropriate content online</p> <p>To understand that things sometimes happen on computers that are not my fault e.g. popups</p> <p>To understand not to feel guilty if something comes on the screen that makes me feel bad</p> <p>To follow the school's safer internet rules</p> <p>To say what I need to do if I am unsure when using a computer</p> <p>To talk about why I need to ask permission to take a photograph of someone</p> | <p>To begin to evaluate websites and know that not everything on the internet is true</p> <p>To recognise that the majority of technology devices have access to the internet</p> <p>To understand that some information is personal and should not be shared online</p> <p>Do I know how to act if I find inappropriate content online</p> <p>To follow the school's safer internet rules</p> <p>To begin to understand the term web address</p> <p>To email safely as a class</p> | <p>To follow the school's safer internet rules</p> <p>To evaluate websites and know that not everything on the internet is true</p> <p>To recognise that there are other people on the internet and this affects how they should use it</p> <p>Do I know how to act if I find inappropriate content online</p> <p>To tell a trusted adult if someone they do not know tries to contact them via the internet</p> <p>To understand that I should only open an email from someone they know</p> | <p>Pupils should be taught to: 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 technologies</p> |

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| | | | | <p>To talk about the importance of not sharing personal information (i.e. passwords, name etc.)</p> | <p>To send and receive emails safely</p> <p>Do I understand why passwords should not be shared</p> <p>To use the internet safely for learning and communicating with others</p> <p>To recognise advertising on website and learn to ignore it</p> | |
| <p>Digital Literacy</p> | <p>To explore sounds on a device</p> <p>To understand that things can be recorded e.g. with cameras or tablets</p> <p>To use a digital device to take a photograph</p> | <p>To write my name using a keyboard on different devices</p> <p>To use a simple paint programme</p> <p>To understand the purpose of and experiment with hardware such as cameras, computers, iPad, voice recorders etc.</p> | <p>Do I recognise what an email address looks like</p> <p>To join in sending a class email</p> <p>To enter text using a keyboard</p> <p>To record a sound and play it back</p> <p>To use and name the use the space bar,</p> | <p>To send group email in a controlled environment and reply</p> <p>To draw on screen image</p> <p>Do I know how to use the simple functions of a tool bar</p> <p>To add images and clip art images</p> | <p>Am I aware that email is used beyond school</p> <p>To send an individual email in a controlled environment and reply</p> <p>To develop speed when typing and use a simple document with increasing control</p> <p>To word process work, changing the</p> | <p>Pupils should be taught to: use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> |

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| | | | <p>backspace and return key</p> <p>To create an image relating to a topic covered in class and add a title</p> | <p>To cut copy and paste onto a document</p> <p>To capture & download images from a camera/device</p> <p>To record a video</p> <p>To record people's voices as a voice over</p> <p>To create basic presentations</p> | <p>font, font size, and colour</p> <p>To cut copy and paste an image, text box, word art and clipart onto a document</p> <p>To format text to refine and improve E.g., underline, italics, bold.</p> <p>To produce an interactive presentation using a range of media E.g. slide transition/ sound effects etc.</p> | |
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