

| | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| What is a computer (CS) | <ul style="list-style-type: none"> Children recognise and use, the key parts of a computer selecting a digital device to fulfil a specific task. (CS) | <ul style="list-style-type: none"> To choose a piece of technology to do a job. To recognise that some technology can be used in different ways. To identify and use the main parts of the computer. (mouse, keyboard to type and edit) | <ul style="list-style-type: none"> To describe some uses of computer. To describe and identify information technology in and beyond school. To show how to use information technology safely. | <ul style="list-style-type: none"> To explain that a computer system accepts an input and processes it to produce and output. To explain how networks can be used to share information and be connected to other networks. To explain the role of a switch server and wireless access points in a network. | <ul style="list-style-type: none"> To outline how information can be shared. Describe how to access the World Wide Web. To describe the types of content/media that can be added, created and shared on the World Wide Web. | <ul style="list-style-type: none"> To recognise the role of computer systems in our lives. To recognise that data is transferred using agreed protocols (methods) and that data is transferred in packets. To explain that the internet allows different media to be shared. | <ul style="list-style-type: none"> To use a variety of search engines and compare the results. To identify that results from search engines can include advert and that the adverts can be targeted. To evaluate different methods of online communication. |
| Programming & Algorithms (CS) | <ul style="list-style-type: none"> Follow and Input a short sequence of instructions to control a device. (P&A) | <ul style="list-style-type: none"> To choose a series of words that can be enacted as a programme. To choose and run, a series of commands that can be run as a program. To run a programme on a device. | <ul style="list-style-type: none"> To choose a series of words that can be enacted as a sequence. To create and debug a program that I have written. To run a program on a device. | <ul style="list-style-type: none"> To build and order a sequence of commands in a program. To combine commands in a program To create a sequence of commands to produce a given outcome. | <ul style="list-style-type: none"> To use infinite and count-controlled loops to produce a given outcome. To recognise tools that enable more than one process to be run at the same time (concurrency). To create two or more sequences that run at the same time. | <ul style="list-style-type: none"> To create a condition-controlled loop and to experiment with a repeated – until loop. To use selection to switch the program flow in one or two ways. To use a condition in an ‘if.. then... else...’ statement to produce given outcomes. | <ul style="list-style-type: none"> To identify a variable and experiment with the value of it in an existing programme. To use a variation in conditional statements to control the flow of a programme. To use the same variables in more than one location in a programme. |
| Creating media (Information technology) | <ul style="list-style-type: none"> They will access content in a range of formats, e.g. image, video, audio and input a short sequence of instructions to control a device. (IT) | <ul style="list-style-type: none"> To use a computer to make digital marks, to create a picture. To store, retrieve, edit, and resave information (work). To use letters, numbers, space key, backspace, punctuation and special characters to enter text into computer. | <ul style="list-style-type: none"> To capture a digital image, by holding the device safely and what to press or tap to take the picture. To review photographs taken deleting poor-quality images, recolouring, cropping, onion skinning, and editing the images. To explain that stored information (work) can be retrieved, edited and resaved. | <ul style="list-style-type: none"> To setup a device to capture a series of stop frame photos. To use tools (onion skinning) to review subject position. To choose fonts, resizing and apply effects to text and images when reviewing and editing documents. | <ul style="list-style-type: none"> To recognise that digital images can be manipulated for different reasons. To consider the impact of changes made to the quality of the image. To recognise that sound can be digitally recorded because some digital device have microphones. To recognise that audio is stored as a file that can be edited, altered and layered. | <ul style="list-style-type: none"> To capture a video considering safe operation of the recording device, panning left and right, focus, Zoom using techniques to create specific effects. To edit video by selecting a section, applying and effect, deleting sections, splitting sections and cropping sections. To modify and object by; repositioning, rotating, resizing, recolouring. To select multiple objects and combine them changing the layers. | <ul style="list-style-type: none"> To create 3D graphical objects by, altering the view, selecting and placing the object in a 3D space, duplicating and deleting the object. To modify an object by: repositioning, rotating, and resizing in three dimensions, recolouring and using an object as a place holder. To create new webpage by adding and styling text to change its appearance. Embedding media in a web page, through the use of hyperlinks. |
| Data & information (Information technology) | | <ul style="list-style-type: none"> To collect data and show that it can be counted. To explain that objects can be grouped by similarities (Attributes) To describe groups of objects (based on commonality) | <ul style="list-style-type: none"> To show how to enter and view a variety of formats of data on a computer. To use pictograms to answer single attribute questions. To use a computer programme to answer comparison questions (graphs, tables) | <ul style="list-style-type: none"> To retrieve information from different levels of the branching database. To create questions with yes/no answers. To create and interpret a branching database. | <ul style="list-style-type: none"> To choose how often to automatically collect data samples. To use a computer program to sort data by one attribute. To present data in a table and a graph. | <ul style="list-style-type: none"> To navigate and design a structure for a flat-file database. To choose which attribute and value to search by to answer a given question (operands). To choose multiple criteria to search data to answer a given question (‘And’ and ‘Or’) | <ul style="list-style-type: none"> To recognise that data can be calculated using different operations. To recognise that changing inputs also changes outputs. To apply formulas to data including duplication. |