

Curriculum Progression in Computing

BEAVER GREEN PRIMARY SCHOOL





Key Stage	Year Group	Computer Systems and Networks	Creating Media - Digital Painting	Creating Media - Digital Writing	Data and Information - Grouping Data	Programming A - Moving a Robot	Programming B - Animation
Key Stage 1	1	I can explain technology in our classroom. I can use technology. I can develop my mouse skills I can use a computer keyboard. I can develop my keyboard skills. I can use a computer responsibility.	I can learn how to paint on a computer I can use shapes and lines on the computer I can make careful choices I can understand why I made that decision. I can do painting all by myself. I can compare computer art and painting	I can explore the keyboard. I can add and remove text. I can explore the toolbar I make changes to the text I can explain my choices. I can explain the differences between typing and writing	I can label and match. I can group and count. I can describe an object. I can make different groups. I can compare groups. I can group objects to answer a question	I can understand the buttons on a robot. I can program the robot in directions. I can program the robot to move forwards and backwards. I can program the robot to go in four directions. I can explain what my robot can do. I can program my robot to do routes.	I can compare animation tools. I can join blocks in animation. I can make changes in animation. I can add sprites in animation. I can design a project I can follow my design.





Key Stage	Year Group	Computer Systems and Networks	Creating Media - Digital Photography	Creating Media - Making Music	Data and Information - Pictograms	Programming A - Robot Algorithms	Programming B - An introduction to quizzes
Key Stage 1	2	I can understand what IT is. I can understand IT in school. I can understand IT across the world. I can understand the benefits of IT. I can use IT safely. I can use IT in different ways.	I can take photographs. I can understand portrait or landscape. I can explain what makes a good photograph. I can explore using lighting when taking a photograph. I can explore different effects when taking a photograph. I can recognise if photographs are real or not.	I can explain how music makes us feel. I can understand rhythms and patterns. I can explain how music can be used. I can explore notes and tempo. I can create digital music. I can review and edit music.	I can count and compare. I can enter data. I can create pictograms. I can understand what an attribute is. I can compare people when using data. I can present information.	I can give instructions to a robot. I can create a range of sequences. I can make predictions. I can use mats and routes. I can design an algorithm. I can debug.	I can recap Scratch Jr. I can predict an outcome of a sequence. I can use a design. I can change a design. I can design and create a program. I can evaluate my design.





Key Stage	Year Group	Computer systems and networks	Creating media - animation	Creating media - desktop publishing	Branching databases	Programme A - sequence in music	Programme B - events and actions
Key Stage 2	3	I can explain how a digital device works. I can explain what parts make up a digital device. I can explain how a digital device helps us. I can explain how a computer network shares information. I can understand how computers are connected. I can recognise the components of a school network.	I can explore that animation is a sequence of pictures or drawings. I can relate animated movement with a sequence of images. I can plan an animation. I can identify the need to work consistently and carefully. I can review and improve an animation. I can evaluate the impact of adding other media to an animation.	I can recognise how text and images communicate information. I can recognise that text and layout can be edited. I can choose appropriate page settings. I can add content to a desktop publishing document. I can consider how different layouts suit different purposes. I can consider the benefits of desktop publishing.	I can create questions with yes/no answers. I can identify the object attributes needed to collect relevant data. I can create a branching database. I can explain why it is important for a database to be well structured. I can identify objects using a branching database. I can compare the information known in a pictogram with a branching database.	I can explore a new programming environment. I can identify that commands have an outcome. I can explain that a programme has a start. I can create a project from a given task. I can change the appearance of my project. I can create a project.	I can explain how a sprite moves. I can create a programme to move a sprite in four directions. I can adapt a programme to a new context. I can develop my programme by adding features. I can identify and fix bugs in a programme. I can design and create a mazed base challenge.





Key Stage	Year Group	Computer Systems and Networks - The Internet	Creating media - Audio editing		Data and information - Data logging	Programming A - Repetition in Shape	Programming B - Repetition in games
Key Stage 2	4	I can connect networks I can explain what the internet is made of I can share information online. I can understand what a website it I can explore who owns the world wide web I can investigate false information	I can explore devices that record sounds. I can record sounds. I can create a podcast I can edit digital recordings I can combine audio I can evaluate podcasts	I can change digital images I can change the composition of images I can change images for different uses. I can retouch images. I can recognise fake images. I can make and evaluate a publication.	I can chooses a data set to answer a question I can explain that sensors are input devices I can identify a suitable place to collect data I can analyse data I can propose a question that can be answered by data I can interpret data that has been collected by a data logger	I can programme a screen turtle. I can programme letters. I can identify patterns and sequences. I can use loops to create shapes. I can identify 'chunks' of action in the real world. I can create a program.	I can use loops to create shapes I can modify loops to give a different outcome I can animate my name I can modify a game I can design a game I can refine the algorithm in my game





Key Stage	Year Group	Computer systems and networks - sharing information	Creating media - Vector drawing	Creating media - video editing	Data and information - flat file databases	Programming A - selection in physical computing	Programming B - selection in quizzes
Key Stage 2	5	I can explain that systems are built using a number of parts I can identify tasks that are managed by computer systems I can transfer information. I can send information over the internet in different ways. I can make thoughtful suggestions on my group's work I can identify different parts of working together online	I can recognise that vector drawings are made using shapes I can create images. I can make effective drawings I can change the order of layers in a vector drawing I can manipulate objects I can create a vector drawing	I can identify the features of videos I can experiment with different camera angles I can use a storyboard I can plan a video I can import and edit video I can evaluate a video	I can create a paper based database I can explain what a 'field' and a 'record' is in a database I can explain how information can be grouped. I can use search tools I can compare data visually I can present my findings to a group	I can connect a crumble I can combine output components I can explain that a condition is either true or false I can explain that a condition being met can start with an action I can draw designs I can write and test algorithms	I can identify conditions in a programme I can create a programme with different outcomes I can explain that a program flow can branch according to a condition I can plan a quiz I can test a quiz I can evaluate a quiz





Key Stage	Year Group	Combining systems and networks - communication	Creatine media - 3D modelling	Creating media - web page creation	Data and Information - spreadsheets	Programming A - variables in games	Programming B - sensing
Key Stage 2	6	I can compare results from different search engines I can explain why we need tools to find things online I can understand how search results are ranked I can explain how search results are ranked I can explain why people communicate in different ways I can decide when I should and should not share	I can explore 3D modelling I can resize a 3D object I can rotate and position a 3D object I can create a 3D object of an appropriate size. I plan my own 3D model I can make my own 3D model	I can understand what makes a good website I can explore how to layout a website I can say why I should use copyright-free images I can add content to my own webpage I can explain what the navigation path is I can create hyperlinks to link other people's work	I can understand what a spreadsheet is I can modify a spreadsheet I can add formula to a spreadsheet I can create a formula that includes a range of cells I can use a spreadsheet to answer questions I can produce a graph	I can identify examples of information that is variable I can explain that a variable has a name and a value I can decide where in a program to change a variable I can explain my design choices. I can create the artwork for my project I can share my game with others	I can transfer my program to control a device I can determine the flow of a program using selection I can use a condition to change a variable I can modify a program to achieve a different outcome I can design the algorithm for my project I can make a step counter