Computing Unit Overview

Francis Baily School

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS	**Let's Explore**	**Marvellous Machines**	**Long Ago**	**Ready, Steady, Grow**	**Animal Safari**	**On The Beach**
1	**Technology around us** Recognising technology in school and using it responsibly	**Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working nondigitally	**Moving a robot** Writing short algorithms and programs for floor robots and predicting program outcomes.	**Digital writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Grouping data** Exploring object labels, then using them to sort and group objects by properties.	**Programming Animations** Designing and programming the movement of a character on screen to tell stories.
2	**Information Technology Around Us** Identifying IT and how its responsible use improves our world in school and beyond.	**Digital Photography** Capturing and changing digital photographs for different purposes.	**Robot algorithms** Creating and debugging programs and using logical reasoning to make predictions.	**Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	**Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	**Digital Authors** Creating content to publish.
3	**Connecting computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected.	**Researching in Science: body parts** Using the Internet to find information for a purpose.	**Stop Frame Animation** Capturing and editing digital still images to produce a stop frame animation that tells a story	**Branching Databases in Science: materials** Building and using branching databases to group objects using yes/no questions	**Programming** Writing algorithms and programs that use a range of events to trigger sequences of actions.	**Presentation in History: Romans** Creating content for presentation.
4	**The internet** Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	**Audio editing in History: Viking Interview** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**Repetition in shape** Using a text-based programming language to explore count-controlled loops when drawing shapes.	**Data Logging in Science: grouping and classifying** Recognising how and why data is collected to carry out an investigation.	**Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.	**Creating media in D&T – making a tomb** Creating content in digital images.
5	**Sharing Information** Recognising IT systems in the world and how some can enable searching on the internet.	**Video Editing in Science: Space** Planning, capturing, and editing video to produce a short film.	**Selection in physical computing using Crumbles** Exploring conditions and selection using a programmable microcontroller.	**Research for Poster** Use Internet to find information for content and create a digital poster.	**Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.	**Vector Drawing in Art** Creating images in a drawing program by using layers and groups of objects
6	**Internet communication** Exploring how data is transferred by working collaboratively online.	**Creating website in Science: Healthy eating** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation	**Variables in games** Exploring variables when designing and coding a game.	**Creating media 3d modelling bridges** Planning, developing, and evaluation 3D computer models of physical objects.	**Sensing using Microbits** Designing and coding a project that captures inputs from physical devices	**Introduction to spreadsheets in Maths: Statistics** Answering questions by using spreadsheets to organise and calculate data.