Swain House Primary School Computing - Long Term Plan (includes lesson plans that cover all the DfE statutory requirements for Computing)

Based on TeachComputing.org Curriculum

Year group	Autumn 1 Computing Systems and Networks	Autumn 2 Creating Media	Spring 1 Programming A	Spring 2 Data and Information	Summer 1 Creating Media	Summer 2 Programming B
EYs						
Y1	**Unit: Technology around us** Recognising technology in school and using it responsibly.	**Unit: Digital Painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	**Unit: Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes	**Unit: Grouping Data** Exploring object labels, then using them to sort and group objects by properties.	**Unit: Digital Writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Unit: Introduction to animation** Designing and programming the movement of a character on screen to tell stories.
Y2	**Unit: Information Technology around us** Identifying IT and how its responsible use improves our world in school and beyond.	**Unit: Digital photography** Capturing and changing digital photographs for different purposes.	**Unit: Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	**Unit: Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	**Unit: Making music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	**Unit: Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
Y3	**Unit: Connecting Computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	**Unit: Stop-frame animation** Capturing and editing digital still images to produce a stop-frame animation that tells a story.	**Unit: Sequencing sounds** Creating sequences in a block-based programming language to make music.	**Unit: Branching databases** Building and using branching databases to group objects using yes/no questions.	**Unit: Desktop publishing** Creating documents by modifying text, images, and page layouts for a specified purpose.	**Unit: Events and actions in programs** Writing algorithms and programs that use a range of events to trigger sequences of actions.
Y4	**Unit: The Internet** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	**Unit: Audio editing** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**Unit: Repetition in shapes** Using a text-based programming language to explore count-controlled loops when drawing shapes	**Unit: Data logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	**Unit: Photo editing** Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	**Unit: Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Y5	**Unit: Sharing Information** Identifying and exploring how information is shared between digital systems.	**Unit: Video editing** Planning, capturing, and editing video to produce a short film.	**Unit: Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.	**Unit: Flat-file databases** Using a database to order data and create charts to answer questions.	**Unit: Vector drawing** Creating images in a drawing program by using layers and groups of objects.	**Unit: Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.
Y6	**Unit: Internet Communication** Recognising how the WWW can be used to communicate and be searched to find information.	**Unit: Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	**Unit: Variable in games** Exploring variables when designing and coding a game.	**Unit: Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	**Unit: 3D Modelling** Planning, developing, and evaluating 3D computer models of physical objects.	**Unit: Sensing** Designing and coding a project that captures inputs from a physical device.