Subject on a Page Overview for Computing

Cycle 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Robins	Creating images e.g. taking photos		Positional Language e.g Bee Bot		Creating art work e.g. Just2easy paint on Ipad	
Starlings	**Computing systems and networks – Technology around us** - Uses of information technology beyond school - E-safety	**Creating Media - Digital Writing** - Create and manipulate digital content - Word processing	**Data & Information - Grouping Data** - Identify and label - Group and count - Describe properties - Count and compare - Answer questions	**Programming B - Programming Animation** - Instructions in sequences - Create and debug simple programs	**Creating Media: Digital Photography** - Capturing, editing, and improving photos - Real or not-real?	**Programming – B Introduction to Quizzes** - Create and debug simple programs - Use logical reasoning to predict the behaviour of simple programs
Kingfishers	**Programming A Sequencing sounds** - Sequence commands - Design and create programmes - Implement an algorithm	**Creating media – Desktop publishing** - Use text and images to communicate messages - Evaluate how and why desktop publishing is used in the real world	**Programming B Events and actions in programs** - Explore relationships between events and actions - Creating and modifying code	**Computing systems and networks – Connecting computers** - Understand inputs, processes and outputs - Explain how a computer network can share information - Recognise the physical components of a network	**Creating media – Stop-frame animation** - Animation as a sequence of drawings or photographs - Plan and create an animation - Review and improve an animation	**Data and information – Branching databases** - Attributes - Physical and on-screen branching databases - Identification tools - Real world applications
Sandpipers	**Programming A – Variables in games** - Design, write and debug programs - Decomposition - Use sequence, selection, and repetition - Work with variables and different forms of input and output	**Creating media – 3D Modelling** - Select, use, and combine a variety of software (including internet services) on a range of digital devices - Design and create a range of programs, systems, and content	**Computing systems and networks - Systems and searching** - Understand computer networks, including the internet - Opportunities for communication and collaboration - E-Safety	**Programming B - Sensing movement** - Design, write, and debug programs that accomplish specific goals - Control or simulate physical systems - Solve problems using decomposition - Detect and correct errors in algorithms and programs	**Creating media - Video production** - Use search technologies effectively - Evaluate digital content - Select, use, and combine a variety of software (including internet services) on a range of digital devices	**Creating media – Introduction to vector graphics** - Identify that drawing tools can be used to produce different outcomes - Create a vector drawing by combining shapes - Use layering to create an image - Modify objects to create a new image

Cycle 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Robins	Creating images e.g. taking photos		Positional Language e.g Bee Bot		Creating art work e.g. Just2easy paint on Ipad	
Starlings	**Programming A - Moving Robots** - Understand simple algorithms - Create and debug simple programs	**Computing Systems and Networks: IT Around Us** - Use technology purposefully - Recognise common uses of IT beyond school - E-Safety	**Data & Information - Pictograms** - Use technology purposefully to create and organise, digital content - Explore attributes - Present data	**Programming – A Robot Algorithms** - Instructions in sequences - Design algorithms, test as programs and debug	**Creating Media: Digital Music** - Using a computer to create music - Compare creating music digitally and non-digitally - Patterns	**Creating Media: Digital Painting** - Understand a range of tools used for digital painting - Create digital paintings
Kingfishers	**Computing systems and networks – The Internet** - Connecting networks - Sharing information via websites - Ownership and online content - Consequences of unreliable content	**Creating media – Audio production** - Recording sound - Editing audio - Planning and creating podcasts - Combining audio - Evaluating effectiveness	**Programming A – Repetition in shapes** - Algorithms - Patterns and repeats - Count controlled loops - Decomposition - Debugging	**Data and information – Data logging** - Data sets - Data loggers - Interpreting data - Drawing conclusions - Benefits of data loggers	**Creating media – Photo editing** - Changing digital images - Recolouring - Cloning - Combining - Creating - Evaluating	**Programming B – Repetition in games** - Count controlled loops in a different environment - Modifying loops - Designing an algorithm - Creating an algorithm
Sandpipers	**Programming A – Selection in physical computing** - Decomposition - Sequencing - Debugging - Write a program that includes count-controlled loops - Design and create a program that controls a physical computing project	**Creating media – Web page creation** - Consider the ownership and use of images (copyright) - Use search technologies effectively - Plan and create a webpage - E-Safety, respect and responsibility	**Data and information - Introduction to Spreadsheets** - Create and build a data set in a spreadsheet - Apply formulas to data - Use and present data for a purpose	**Programming B – Selection in quizzes** - Explain how selection is used in computer programs - Design, write and debug programs that accomplish specific goals - Use sequence, selection, and repetition in programs	**Data and information – Flat-file databases** - Use tools within a database to order and answer questions about data - Create graphs and charts from data to solve problems - Present data and information	**Computing systems and networks - Communication and collaboration** - Explore how data is transferred over the internet - Explore the makeup and structure of data packets - Communicate and collaborate responsibly

'Internet safety' features heavily throughout all areas of the Computing curriculum, as well as being included in much PSHE learning throughout the school.