

Aldermaston CE Primary School – Computing Curriculum

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Years 1 & 2	Year A	Online safety - Logging in with a username and password, password safety Effective searching - What is a search engine? - Using search engines	Lego builders - What happens when instructions aren't clear? - Ordering instructions correctly Spreadsheets - Appearance of spreadsheets - Entering data into spreadsheet cells	Creating pictures - Digital art - Exploring impressionism, pointillism and surrealism	Pictograms - Understanding that data can be represented in picture format - Contributing to class pictogram - Creating pictograms to record data	Technology outside school - What is technology? - How can it make life easier? Grouping and sorting - Sorting items using a range of criteria, e.g. size, colour, material	Presenting ideas - Planning a presentation - Concept mapping - Understanding your audience
	Year B	Online safety - Logging in with a username and password, password safety Maze explorers - To use direction keys - To create and debug a simple algorithm (set of instructions)	Spreadsheets - Copying and pasting from cells - Making a graph - Planning your shopping Making music - Creating digital music sequences - Changing tempo and volume	Animated story books - Adding animation to a story - Using sound including voice recordings and music Online safety - Sharing information safely - Keeping personal data and hardware secure.	Questioning - Use of pictograms - Constructing a binary tree and using yes/no questions - Searching for information	Coding - Following instructions - Backgrounds, objects and actions - Making a computer program	Coding - Using algorithms - Understanding that different objects have different properties - Understanding and debugging simple programs
Years 3 & 4	Year A	Online safety - Is everything we read online true? - Age restrictions Coding - Using flowcharts - The repeat command in computer programming - Setting timings	Spreadsheets - Locating cells - Collecting data and comparing values Touch typing - Using specific fingers for specific keys - Healthy posture	E-mail - Using e-mail safely - Using address books - Sending attachments	Branching databases - What is a branching database? - Questions used to classify groups of objects - Creating a branching database	Simulations - What is a computer simulation? - Uses of simulations - Analysing and evaluating simulations	Graphing - Types of graphs and diagrams used to represent data - Using axes - Interpreting graphs
	Year B	Online safety - Digital footprints - Recognising SPAM - Avoiding plagiarism Coding - The coding process – design, code, test and debug - Variables, if/else statements	Spreadsheets - Using a spreadsheet to model a real life situation - Formatting cells - Adding a formula to a cell to automatically complete a calculation	Writing for different audiences - Exploring how font size and style can affect the impact of a text. - Writing for different purposes, e.g. news reports or community campaigns	Logo - Learning the coding language of Logo - To input simple instructions in Logo and build procedures in Logo	Animation - What makes effective animation? - Onion skinning - Using 'stop motion' animation	Effective Searching - Making effective searches - Locating reliable information Hardware Investigators - What are the different parts that make up a computer? - Recalling the different parts of a computer
Years 5 & 6	Year A	Online Safety - SMART rules - Sharing images and reliability of information sources Coding - Simulating a physical system - Timer countdowns, scorepads - Decomposition and abstraction	Spreadsheets - Using formulas to calculate products and complete conversions - Spreadsheets for budgeting	Databases - What is a database - Creating and searching databases - Collaborating on a database	Game Creator - Designing a playing area - Balancing challenge and enjoyment - Evaluation and improvement	3D Modelling - Learn about computer aided design - Designing using 2D, 3D and net images - To create a model to match specific criteria	Concept Maps - Uses of concept maps - How visual representations help us to understand complex ideas - Collaborating on concept maps
	Year B	Online Safety - How long does information stay online? - Phishing and spoof websites - Use of mobile devices Coding - Using functions in coding - Creating simulations - Allowing user input	Spreadsheets - Using formula for column totals - Computational models - Using spreadsheets to plan expenditure	Blogging - What is a blog? - Selecting blog content for different purposes - Blog posts and commenting on blogs	Text Adventures - Features of text based adventures - Planning text based options and linked outcomes - Creating functions in a program	Networks - The difference between the internet and the world wide web - LANs and WANs - The work of Tim Berners-Lee	Understanding Binary - What is binary? - Writing binary numbers - Binary and computer memory and programming