

BUILDS ON... LEADS TO...

COMPUTING

YEAR 3	AUT 1	Buils on...	Leads to...	AUT 2	Buils on...	Leads to...	SPR 1	Buils on...	Leads to...
	Handling Data	Year 1 Sorting data according to criteria. Collecting and presenting data in a picture format. Year 2 Children will have looked at spreadsheets and used questioning to separate and group data.	Year 6 Organising data Creating graphs and charts in Spreadsheets unit.	Multimedia Text and Images	Year 1 Creating text and the use of illustrations Genre. Year 2 Presenting ideas in art form Presenting the same information in different styles.	Year 4 Writing for different audiences unit, builds on touch typing skills. Understanding text formatting Year 6 Considering blogging as a way of presenting ideas	Technology in Our Lives	Year 1 Online safety and technology outside of school Year 2 Sharing online. Emotional impact of communications. Exploration of what the internet is. Accessing the World Wide Web. Searching and sharing.	Year 4 Digital footprints. Year 5 Responsibility to others when sharing. Year 6 Bloggin unit of work. Impact of communication on the audience. Appropriate comments.
	SPR 2	Buils on...	Leads to...	SUM 1	Buils on...	Leads to...	SUM 2	Buils on...	Leads to...
	Coding and Programming	Year 1 Executing a program. Objects and actions. Introducing block coding. Algorithms Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Forward planning to.	Year 4 Coding unit - Code, test, debug, process. Number variables. Repeat until and if/else statements. Animation unit – Text-based coding. Utilise understanding of coding structures. Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation. Year 6 Using functions. Flowcharts and control simulations. User input. Binary unit – development from text-based coding. Maintaining a mental map. Debugging skills.	Coding and programming (cont.)	Year 1 Executing a program. Objects and actions. Introducing block coding. Algorithms Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Forward planning to	Year 4 Micro:bits unit Coding unit - Code, test, debug, process. Number variables. Repeat until and if/else statements. Animation unit – Text-based coding. Utilise understanding of coding structures. Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation. Year 6 Using functions. Flowcharts and control simulations. User input. Binary unit – development from text-based coding. Debugging skills. Year 8 BBC Micro:bits	Aspirations, Opportunities and Careers	Year 1 Creating text and the use of illustrations Genre. Year 2 Presenting ideas in art form Presenting the same information in different styles.	Year 4 Writing for different audiences unit, builds on touch typing skills. Understanding text formatting. Year 6 Considering blogging as a way of presenting ideas

YEAR 4	AUT 1	Builds on...	Leads to...	AUT 2	Builds on...	Leads to...	SPR 1	Builds on...	Leads to...
	Handling Data Hardware Investigators	Year 1 Developing ideas about the concept of technology. Understanding that many devices use computational technology. Year 2 How devices allow connections to access functions and the World Wide Web. Searching and sharing. Software capabilities. Year 3 Email unit – understanding 2-way communication technologies using algorithms.	Year 6 Blogging – Using device functions for 2-way communication via the World Wide Web. Understanding Binary The relationship between hardware components and the signals that are sent that represent software functions. Year 7 Computer Hardware and Software	Multimedia Text and Images Writing for different Audiences	Year 1 Simple text entry. Use of a writing template. Creating text and use of illustrations. Year 2 Presenting ideas Altering fonts. Creating work for varying purposes. Year 3 Touch typing and fluency. Email unit – Considering communication style. Email simulations. Presenting unit – Use of MS PowerPoint to learn about good presentations.	Year 5 Word processing unit Develop text skills for effective documents. Familiarity with the formatting and text use. Applying skills to a more complex environment. Year 6 Considering communication style. Impact of style on audience response.	Technology in Our Lives Animation	Year 1 What animation is. Animating images using built in concepts. Concept of background and foreground.	Year 5 Game Creator Animating 3D characters. Adding a gaming element to animation. 3D modelling unit Art effects in 3D Moving and designing in 3 dimensions.
	SPR 2	Builds on...	Leads to...	SUM 1	Builds on...	Leads to...	SUM 2	Builds on...	Leads to...
	Coding and Programming Coding	Year 1 Executing a program. Objects and actions. Introducing block coding. Algorithms Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Forward planning to. Year 3 Timers Repeat Code, test, debug, process.	Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation. Year 6 Using functions. Flowcharts and control simulations. User input. Binary unit – development from text-based coding. Maintaining a mental map. Debugging skills. Year 7 Digital imaging Kodu Game Creator	Coding and programming (cont.) Micro:bits	Year 1 Executing a program. Objects and actions. Introducing block coding. Algorithms Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Forward planning to Year 3 Micro:bits	Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation. Year 6 Using functions. Flowcharts and control simulations. User input. Binary unit – development from text-based coding. Maintaining a mental map. Debugging skills. Year 8 BBC Micro:bits	Aspirations, Opportunities and Careers (Wider curricular links)	Year 1 Creating text and the use of illustrations Genre. Year 2 Presenting ideas in art form Presenting the same information in different styles. Year 3 Presentation skills linked to MS PowerPoint. Formatting text and inserting images.	Year 6 Considering blogging as a way of presenting ideas.

YEAR 5	AUT 1	Builds on...	Leads to...	AUT 2	Builds on...	Leads to...	SPR 1	Builds on...	Leads to...
	Handling Data Spreadsheets Microsoft Excel (Calculation links to Mathematics)	Year 1 Spreadsheet navigation Vocab: cell, column, row What is data? Representing data. Year 2 Copying and pasting. Totalling tools. Table layout. Block graph. Addition. Year 3 Graphing unit Data representation Use software to investigate data.	Year 6 Spreadsheets with MS Excel Calculations. Modelling and problem solving. Organising data. Year 8 Date representation Year 9 Date Science Personal Finance	Multimedia Text and Images Word Processing Microsoft Word	Year 1 Simple text entry. Use of a writing template. Creating text and use of illustrations. Year 2 Presenting ideas Altering fonts. Year 3 Email unit – Considering communication style. Email simulations. Presenting unit – Use of MS PowerPoint to learn about good presentations. Year 4 Writing for different audiences	Year 6 Considering communication style. Impact of style on audience response. Extend text and typing stamina through the planning and creation of blog. Year 7 Digital imaging Kodu Game Creator	Technology in Our Lives 3D Modelling	Year 1 Paint projects – Use of simple paint tools. Year 2 Art effects, collage effects. Year 4 Animation unit – Create a stop motion animation. Create backgrounds and effects.	Year 7 Digital Imaging Kodu Game Creator Year 9 Animation
	SPR 2	Builds on...	Leads to...	SUM 1	Builds on...	Leads to...	SUM 2	Builds on...	Leads to...
	Coding and Programming Coding	Year 1 Executing a program. Objects and actions. Introducing block coding. Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Year 3 Timers. Repeat. Code, test, debug, process. Year 4 Coding unit - Code, test, debug, process. Number variables. Repeat until and if/else statements. Animation unit – Text-based coding. Utilise understanding of coding structures.	Year 6 Using functions. Flowcharts and control simulations. User input. Binary unit – development from text-based coding. Maintaining a mental map. Debugging skills. Year 7 Digital Imaging Kodu Game Creator Year 8 Programming for problem solving BBC Miro:bits Year 9 Animation	Coding and programming (cont.) Game Creator	Year 1 Animating images Background and foreground concepts Year 2 Digitally create music and sound effects Art and collage effects Year 4 Animation Use of sounds, background and effects	Year 7 Digital Imaging Kodu Game Creator Year 8 Programming for problem solving BBC Miro:bits Year 9 Animation	Aspirations, Opportunities and Careers (Wider curricular links)	Year 1 Creating text and the use of illustrations Genre. Year 2 Presenting ideas in art form Presenting the same information in different styles. Year 3 Presentation skills linked to MS PowerPoint. Formatting text and inserting images. Year 4 Writing for different audiences unit, builds on touch typing skills. Understanding text formatting.	Year 6 Considering blogging as a way of presenting ideas.

YEAR 6	AUT 1	Builds on...	Leads to...	AUT 2	Builds on...	Leads to...	SPR 1	Builds on...	Leads to...
	Handling Data Spreadsheets (MS)	Year 1 Spreadsheet navigation Vocab: cell, column, row What is data? Representing data. Year 2 Copying and pasting. Totalling tools. Table layout. Block graph. Addition. Year 3 Graphing unit Data representation Use software to investigate data. Year 5 Spreadsheets Converting measures Count tool Formulae	Year 8 Date representation Year 9 Date Science Personal Finance	Multimedia Text and Images Blogging	Year 1 Technology outside of school Online Safety Year 2 Sharing online Digital footprint Privacy Year 3 Email simulations Communication methods Evaluating communication Email safety 2-way communication Attachments Year 5 Use of images Plagiarism Citing sources	Year 7 Digital imaging Kodu Game Creator	Technology in Our Lives Networks	Year 1 Technology outside of school Year 2 Effective searching Exploration of the internet and devices Year 3 Email simulations 2-way communication via World Wide Web Year 4 Hardware investigators Understanding of components that make devices function including those for networking	Year 7 Computer Hardware and Software
	SPR 2	Builds on...	Leads to...	SUM 1	Builds on...	Leads to...	SUM 2	Builds on...	Leads to...
	Coding and programming Coding	Year 1 Executing a program. Objects and actions. Introducing block coding. Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Year 3 Timers. Repeat. Code, test, debug, process. Year 4 Coding unit - Code, test, debug, process. Number variables. Repeat until and if/else statements. Animation unit –	Year 7 Digital Imaging Kodu Game Creator Year 8 Programming for problem solving BBC Miro:bits Year 9 Animation	Coding and programming (cont.) Binary	Year 1 Executing a program. Objects and actions. Introducing block coding. Logical decision making. Sequencing and following instructions. Creating programs using sequencing and repeat. Year 2 Algorithms Collision detection. Buttons. Debugging. Logical decision making. Year 3 Timers. Repeat. Code, test, debug, process. Year 4 Coding unit - Code, test, debug, process. Number variables. Repeat until and if/else statements. Animation unit –	Year 7 Digital Imaging Kodu Game Creator Year 8 Programming for problem solving BBC Miro:bits Year 9 Animation	Aspirations, Opportunities and Careers (Wider curricular links)	Year 1 Creating text and the use of illustrations Genre. Year 2 Presenting ideas in art form Presenting the same information in different styles. Year 3 Presentation skills linked to MS PowerPoint. Formatting text and inserting images. Year 4 Writing for different audiences unit, builds on touch typing skills. Understanding text formatting Year 5 Word Processing skills.	Year 7 The History of Computing Year 8 Enterprise

		Text-based coding. Utilise understanding of coding structures. Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation.			Text-based coding. Utilise understanding of coding structures. Year 5 Efficient coding. Decomposition and abstraction. Friction and functions. Introducing strings. Text variables and concatenation.				
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Topic covered throughout KS2	Builds on...		Leads to...
Online Safety & Digital Literacy (Also covered in RSE curriculum)	All units - Children develop an understanding of the communication capabilities of devices - Use of 2Dos - Saving, opening and editing work - Sharing work - Mouse, keyboard and device skills Online Safety Units Unit 1.1 Unit 2.2 Unit 3.2 Unit 4.2 Unit 5.2 Unit 6.2 Understanding of the connections and communications between devices and device capabilities.	Year 8 Enterprise – The world of business, marketing, finance, advertising and HR. Year 9 Cyber Security	

*All KS3 Data based on Etone College, our local Secondary School.