Miss Norman 2020/2021
Next Review: September 2021

Computing at St Michael-in-the-Hamlet Primary School (SMITH)
Progression

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Computing Progression

Level Expectation at the End of EYFS

Understanding the World (Technology): *Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.*

Key Stage 1 National Curriculum Expectations	Key Stage 2 National Curriculum Expectations
Pupils should be taught to: • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions; • create and debug simple programs; • use logical reasoning to predict the behaviour of simple programs; • use technology purposefully to create, organise, store, manipulate and retrieve digital content; • recognise common uses of information technology beyond school; • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Pupils should be taught to: • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts; • use sequence, selection, and repetition in programs; work with variables and various forms of input and output; • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; • understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration; • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information; • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

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Intent

Our **intent** when teaching Computing is to:

Offer a structured sequence of lessons in units, helping teachers to ensure that they have covered the skills required to meet the aims of the national curriculum whilst ensuring that children develop skills progressively. The content allows for a broad, deep understanding of computing and how it links to children's lives in school and beyond. In a world where we use computing and technology professionally and personally, at SMITH we want children to become digitally literate and proficient for everyday use. Computing lessons allows children to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology safely. It also enables them to become responsible, competent, confident and creative users of information technology.

Implementation

We **implement** by:

Providing lessons that contain an opportunity to revisit concepts and complete analysis and problem-solving. Through our delivery of computing, we intend to inspire a love of the digital world, see its place in their future and give teachers the confidence to deliver. Cross-curricular links will be made, where possible, to support other areas of learning. Our plans and resources are used in combination to ensure children are exposed to a rich variety of activity. In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully. In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology. Data Handling is featured more heavily in UKS2. Skills learnt through KS1 and LKS2 are used to support data presentation. Adult guides/plans are offered from which to base planning, enabling staff to feel confident in the progression of skills and knowledge and that outcomes have been met. An example of keywords has been included in plans, showing the progression of specific language involved in children's learning so that teachers can also assess understanding and progress through vocabulary. We aim to provide a computing curriculum that encourages children to build and create links over time.

All children will access the following areas of learning:
Information Technology: Text and Image, Sound and Motion (KS2) and Data Handling (KS2).
Computer Science: Coding and Programming
Digital Literacy: Technology in Our Lives and Online Safety.

Impact

The **impact** will be:

Learning in computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Children will use digital and technological vocabulary accurately, alongside a progression in their technical skills. They will be confident using a range of hardware and software and will produce high-quality purposeful products. Children will see the digital world as part of their world, extending beyond school, and understand that they have choices to make. They will be confident and respectful digital citizens going on to lead happy and healthy digital lives.

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	KS1	LKS2	UKS2
Text and Images	Children **begin to understand** the particular purposes technology can be used for and that by adding text and images you can communicate with technology. **Children develop their skills in typing, selecting tools and organising information.** **KS1 Computing National Curriculum** Children use technology purposefully to create, organise, store, manipulate and retrieve digital content. Children can: a add text strings, text boxes and show and hide objects and images, manipulating the features (crop, resize etc.); b use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape; c use applications and devices in order to communicate ideas, work, messages and demonstrate control; d save, retrieve and organise work; e use **VOCBULARY** to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.	Children **develop their skills** of formatting using keyboard commands, organising their work to demonstrate effect. In LKS2, they will have the opportunity to express themselves more through digital technology, art, PowerPoint and posters. Children should continue to demonstrate control when operating tools as in KS1. **KS2 Computing National Curriculum** Children understand computer networks, including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration. They select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: a create different effects with different technological tools, demonstrating control; b use appropriate keyboard commands to amend text on a device; c use applications and devices in order to communicate ideas, work, and messages; d save, retrieve and evaluate work, making amendments; e insert a picture/text/graph/hyperlink from the internet or a personal file; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, create, organise, file, folder, close, exit, search, print, password, screenshot, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.	Children **begin to look at new software** and learn how to develop their editing skills further. They become more confident in inserting links, images and formatting text to create effect. **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: a use the skills already developed to create content using unfamiliar technology; b select, use and combine the appropriate technology tools to create effect; c review and improve their own work and support others to improve their work; d save, retrieve and evaluate their work, making amendments; e insert a picture/text/graph/hyperlink from the internet or personal file; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide.

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Sound and Motion	Children **begin to develop** their creativity using technology through recording sound. **Children will also begin to develop their editing skills and control of the tools.** **KS1 Computing National Curriculum** Children use technology purposefully to create, organise, store, manipulate and retrieve digital content. Children can: a use software to record sounds; b change sounds recorded; c save, retrieve and organise work; d use **VOCABULARY** to demonstrate knowledge and understanding in this strand: commands, add sound.	Children **develop their editing skills furthe**r by cropping, organising and arranging film clips. They are able to share work and offer feedback and ideas for improvement with animation and film, giving their opinion on which software to use. **In LKS2, children also look at the history of animation and reflect upon the changes over time.** **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: a use software to record, create and edit sounds and capture still images; b change recorded sounds, volume, duration and pauses; c use software to capture video for a purpose; d crop and arrange clips to create a short film; e plan an animation and move items within each animation for playback; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still image, thaumatrope, zoetrope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.	Children **begin to look more into multimedia broadcasting,** learning new skills including recording short documentaries, podcasts and narration. They become more confident in post-production with editing, trimming and refining their work based on plans they have made. **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: a collect audio from a variety of resources including own recordings and internet clips; b use a digital device to record sounds and present audio; c trim, arrange and edit audio levels to improve quality; d publish their animation and use a movie editing package to edit/refine and add titles; e use **VOCABULARY** to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, upload.

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Handling Data		Children **begin to explore expressing information** by sorting and organising information for others to be able to understand. **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: **a** talk about the different ways data can be organised; **b** sort and organise information to use in other ways; **c** search a ready-made database to answer questions; **d** use **VOCABULARY** to demonstrate knowledge and understanding in this strand: Docs/documents, insert, table.	Data Handling in UKS2 focuses on **selecting the correct method to display data** and using software such as spreadsheets. Children also learn how to check the accuracy of data and compare data for a specific purpose. **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: **a** construct data on the most appropriate application; **b** know how to interpret data, including spotting inaccurate data and comparing data; **c** use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets; **d** add data to an existing database; **e** use **VOCABULARY** to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.

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Technology in Our Lives	Children **begin to make links** to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety. **KS1 Computing National Curriculum** Children recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Children can: a recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping; b use links to websites to find information; c recognise age-appropriate websites; d use safe search filters; e use **VOCABULARY** to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.	Children **refer to online safety rules** when discussing technology in their lives. They are able to **navigate between websites** and use safe search terms on trusted search engines. They become more confident in using email for communication, including attaching and saving files from emails. **KS2 Computing National Curriculum** Children understand computer networks, including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content. Children can: a explain ways to communicate with others online; b describe the world wide web as the part of the internet that contains websites; c add websites to a favourites list; d use search tools to find and use an appropriate website and content; e use strategies to improve results when searching online; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.	Children **can use safe search terms** on trusted search engines, and **evaluate** websites based on layout and information. They become more confident in understanding Google rankings, adverts and the reliability of websites. **KS2 Computing National Curriculum** Children understand computer networks, including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content. Children can: a search for information using appropriate websites and advanced search functions within Google; b use strategies to check the reliability of information (cross-check with another source such as books); c talk about the way search results are selected and ranked; d check the reliability of a website, including the photos on site; e tell you about copyright and acknowledge the sources of information; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.

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Coding and Programming	Children **begin to understand their influence on technology** by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them. **KS1 Computing National Curriculum** Children understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. They create, debug and use logical reasoning to predict the behaviour of simple programs. Children can: **a** give commands one at a time to control direction and movement, including straight, forwards, backwards, turn; **b** control the nature of events for example: repeat, loops, single events and add and delete features; **c** give a set of instructions to follow and predict what will happen; **d** improve/change their sequence of commands by debugging; **e** use V**OCABULARY** to demonstrate knowledge and understanding in this strand: Y1: code, object, action, click, start event, click event. Instructions, decompose, program, programming. Y2: key press, control, algorithm, input, input device, key, key press event, run, execute, direction, clockwise, anti-clockwise. pointer, pointer press, button, debug/bugging.	Children **build on their programming skills** by solving problems and programming commands to achieve a specific outcome. They begin to write programs, explain algorithms and identify errors in their work. **KS2 Computing National Curriculum** Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Children can: **a** use logical thinking to solve an open-ended problem by breaking it up into smaller parts; **b** write a program, putting commands into a sequence to achieve a specific outcome; **c** give a set of instructions to follow and predict what will happen; **d** keep testing a program and recognise when it needs to be debugged; **e** use variables to create an effect, e.g. repetition, if, when, loop; **f** use **VOCABULARY** to demonstrate knowledge and understanding in this strand: Y3: sequence, before/after/between, order, condition, conditional statement, background, hit event, timer event. Y4: variable, alert, score, start, time, value, set and change, repetition, loop, if statement,	Children **extend their programming skills** by using new systems such as a flowchart. They continue to break down problems and create algorithms to solve them. They are able to explain the outcome of an algorithm with confidence and accuracy. **KS2 Computing National Curriculum** Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Children can: **a** use external triggers and infinite loops to demonstrate control; **b** follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols; **c** use conditional statements and edit variables; **d** decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program; **e** keep testing a program and recognise when it needs to be debugged; **f** use **VOCABULARY** to demonstrate knowledge and understanding in this strand: Y5: property, accelerate, decelerate, axis, angle, heading, iteratively, object property, simulation, decomposition, random/randomise, Y6:pixel, grid, convert, alignment, unit, scale, Boolean (binary), analogue, digital, parameter,

Online Safety	Children **begin to consider their activity on the internet** and **learn about ways to keep themselves safe and why it is important to do so**. They also **compare** appropriate and inappropriate activity on the internet and decide what to do next. **KS1 Computing National Curriculum** Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Children can: a identify what things count as personal information; b identify what is appropriate and inappropriate behaviour on the internet; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate how to safely open and close applications and log on and log off from websites; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.	Children **become more aware** of their digital footprint by **reflecting** on their experience on the internet. They are able to understand more about age-appropriate websites and adverts and how adverts are used by companies. Children are **also introduced to the concept of plagiarism and citation**. **KS2 Computing National Curriculum** Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. Children can: a reflect on their own digital footprint and behaviour online; b identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate understanding of age-appropriate websites and adverts; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	Children are **encouraged to identify online risks and share their knowledge** of the risks and consequences for people online. They **begin to think more critically** about what they see online and look at the concept of fake news and false photographs. **KS2 Computing National Curriculum** Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. Children can: a protect their password and other personal information; b be a good online citizen and friend; c judge what sort of privacy settings might be relevant to reducing different risks; d seek help from an adult when they see something that is unexpected or worrying; e discuss scenarios involving online risk; f use **VOCABULARY** to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.

Vocabulary Progression: Examples of vocabulary used in planning and teaching computing across Y1-Y6			
	KS1	**LKS2**	**UKS2**
Text and Image	paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.	draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.	window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide.
Sound and Motion	commands, add sound.	audio, sound, video, movie, embed, link, file format, animate, animation, still image, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.	audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.
Data Handling		Document/docs, insert, table	documents/docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.
Tech in Everyday Life	Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.	filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.	world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.
Coding and Programming	Y1: code, object, action, click, start event, click event. Instructions, decompose, program, programming. Y2: key press, control, algorithm, input, input device, key, key press event, run, execute, direction, clockwise, anti-clockwise. pointer, pointer press, button, debug/bugging.	Y3: sequence, before/after/between, order, condition, conditional statement, background, hit event, timer event. Y4: variable, alert, score, start, time, value, set and change, repetition, loop, if statement,	Y5: property, accelerate, decelerate, axis, angle, heading, iteratively, object property, simulation, decomposition, random/randomise, Y6:pixel, grid, convert, alignment, unit, scale, Boolean (binary), analogue, digital, parameter,
Online Safety	safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.	safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, discern, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.

	Whole School Overview of Progressive Teaching Units					
	Autumn		Spring		Summer	
Y1	**DIGITAL LITERACY** **Online Safety and Technology in Our Lives** Topics Covered: Looking After Myself Online, My Personal Information and My Work Belongs to Me	**COMPUTER SCIENCE** **Coding and Programming** Programming Toys - BeeBots and Espresso Unit 1 – On the Move *Additional: Emails to Santa (Pictures)*	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 2 – Simple Inputs	**INFORMATION TECHNOLOGY** **Text (Typing and Communication)** Develop computing skills to support navigation of a computer or laptop. **Text (Emails)** Develop typing and editing skills to communicate with others via email.	**INFORMATION TECHNOLOGY** **Image (Paintings)** Use painting applications to create posters/art work and make a gallery.	**INFORMATION TECHNOLOGY** **Text and Image (eBooks)** Combine images, text and voice recordings to create eBooks.
Y2	**DIGITAL LITERACY** **Online Safety and Technology in Our Lives** Topics covered: Looking After Myself and Others Using the Internet Safely and Thinking about Networks and Connections	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 1: Different Sorts of Inputs *Additional: Emails to Santa (Letter)*	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 2: Buttons and Instructions	**INFORMATION TECHNOLOGY** **Image (Digital Paintings)** Use software to develop a range of specific techniques based on known artists and create a masterpiece.	**INFORMATION TECHNOLOGY** **Text and Data (Using the Internet)** Use the internet to create, retrieve, organise and store information for research	**INFORMATION TECHNOLOGY** **Text and Image (Presentations)** Develop presentation skills to create own slideshow linked to current topic/research unit including headings, text and a picture..
Y3	**DIGITAL LITERACY** **Online Safety and Technology in Our Lives** Topics covered: Online Relationships and Trusting Online Content	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 1: Sequence and Animation	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 2: Conditional Events and Selection	**INFORMATION TECHNOLOGY** **Text and Image (Digital Drawing)** Developing graphic and presentation skills by drawing as opposed to painting. Create posters considering text, image and layout.	**INFORMATION TECHNOLOGY** **Text and Data Handling (Discerning Research)** Develop the ability to discern digital content and select information for research linked to topic.	**INFORMATION TECHNOLOGY** **Text and Image (Presentations)** Combine images, text, animations and background design to create a presentation.
Y4	**DIGITAL LITERACY** **Online Safety and**	**COMPUTER SCIENCE** **Coding and**	**COMPUTER SCIENCE** **Coding and**	**INFORMATION TECHNOLOGY**	**INFORMATION TECHNOLOGY**	**INFORMATION TECHNOLOGY**

	Technology in Our Lives Topics covered: Wellbeing and Lifestyle. Our Online Identity and Ownership and Copyright	**Programming** Espresso Unit 1:Introduction to Variables	**Programming** Espresso Unit 2: Repetition and Loops	**Text and Image (Presentations)** Create a presentation by extending on previously learnt skills by incorporating action settings, audio/video and hyperlinks. Link to topic.	**Text and Image and Data Handling (Websites)** Use typing, communication and formatting skills to design an organised website that includes texts, pictures and a graph/chart/table. Theme site based on topic research.	**Motion (Animations)** Create and edit animations by creating frames of stop motion animation.
Y5	**DIGITAL LITERACY** **Online Safety and Technology in Our Lives** Topics covered: Our Reputation Online, Evaluating Content Online, Being Healthy Technology Users	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 1: Speed, Direction and Co-ordinates	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 2: Random Numbers and Simulations	**INFORMATION TECHNOLOGY** **Text and Image (Marketing Presentations)** Create and format posters and presentations to market a robot.	**INFORMATION TECHNOLOGY** **Sound and Data Handling (Podcasts)** Plan and create a podcast, understanding that information on the internet can be presented in a range of ways.	**INFORMATION TECHNOLOGY** **Sound and Motion (Movie Trailers)** Plan and create a movie trailer using video, sound and green screen elements.
Y6	**DIGITAL LITERACY** **Online Safety and Technology in Our Lives** Online Relationships, Our Image Online, and Managing Information.	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 1: More Complex Variables	**COMPUTER SCIENCE** **Coding and Programming** Espresso Unit 2: Object Properties	**INFORMATION TECHNOLOGY** **Data Handling (Spreadsheets)** Enter data and formulae in a spreadsheet, ordering and presenting based on calculated data. Design a spreadsheet.	**INFORMATION TECHNOLOGY** **Sound and Motion (Film)** Conduct research about a given topic and make a documentary OR choose a topic and create a film including ending credits, an image title, narration and a range of edited clips.	**INFORMATION TECHNOLOGY** **Image and Text (Leavers' Books)** Combine skills in presentation, organising information and using images and text to create a digital/printed leavers' book. ***COMPUTER SCIENCE*** ***Coding and Programming*** *Espresso:*