
















































































	COMPUTING LONG TERM OVERVIEW						
	EYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	<p>Personal, Social and Emotional Development - Manging Self;</p> <p>☆☆ – Be confident to try new activities and show independence, resilience, and perseverance in the face of challenge.</p> <p>- Explain the reasons for rules, know right from wrong and try to behave; accordingly,</p> <p>E-Safety;</p> <p>☆☆ – Talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you.</p> <p>- Play appropriate games on the Internet.</p> <p>- Talk about good and bad choices when using websites – being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private.</p> <p>Technology in our Lives;</p> <p>- Recognise purposes for using technology in school and at home.</p> <p>☆☆ – Understand that things they create belong to them and can be shared with others using technology.</p> <p>- Recognise that they can use the Internet to play and learn.</p> <p>Expressive Art and Design – Creating with Materials;</p> <p>☆☆ – Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p>How can I move this robot?</p> <p> English- writing</p> <p>Programming A- Moving a robot</p> <p>☆☆ Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions.</p> <p>☆☆ Create and debug simple programs.</p> <p>☆☆ Use logical reasoning to predict the behaviour of simple programs.</p> <p>  Recognise common uses of information technology beyond school.</p> <p>Writing short algorithms and programs for floor robots, and predicting program outcomes</p>	<p>Why did that not work?</p> <p>Programming A -Robotic algorithms</p> <p>☆☆   Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions.</p> <p>☆☆   Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs</p> <p>Creating and debugging programs, and using logical reasoning to make predictions.</p>	<p>How does a digital device work?</p> <p>Computing systems and networks- Connecting computers</p> <p>☆☆ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆ 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.</p> <p>☆☆ 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.</p> <p>Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.</p>	<p>What is the internet?</p> <p>Computing systems and networks- The internet</p> <p>☆☆   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.</p> <p>☆☆   Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆   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.</p> <p>☆☆   Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.</p>	<p>How is the information found on the internet?</p> <p>Computing systems and networks- Sharing information</p> <p>☆☆   Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆   Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆   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.</p> <p>☆☆   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.</p> <p>☆☆   Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Identifying and exploring how information is shared between digital systems.</p>	<p>How is data transferred over the internet?</p> <p>Computing systems and networks- Internet communication</p> <p>☆☆   Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆   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.</p> <p>☆☆   Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆   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.</p> <p>Recognising how the WWW can be used to communicate and be searched to find information.</p>

Autumn 2	<p>Multimedia;</p> <p>☆☆☆ – Use a mouse to rearrange objects and pictures on a screen.</p> <p>- Recognise text, images and sound when using ICT.</p> <p>- Use a camera or sound recorder to collect photos or sound</p> <p>- Begin to use a keyboard</p> <p>- Develop an interest in ICT by using age appropriate websites or programs.</p> <p>Communication and Language – Listening, Attention and Understanding;</p> <p>☆☆☆ - Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions;</p> <p>- Make comments about what they have heard and ask questions to clarify their understanding;</p> <p>Programming;</p> <p>☆☆☆ - Help adults operate equipment around the school.</p> <p>- Use simple software to make things happen</p> <p>- Press buttons on a floor robot and talk about the movements</p> <p>- Explore options and make choices with toys, software and websites</p>	<p>How does technology help us in everyday life?</p> <p>Computing systems and Networks- Technology around us</p> <p>☆☆☆ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>☆☆☆☆ Recognise common uses of information technology beyond school.</p> <p>☆☆☆ 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.</p> <p>Recognising technology in school and using it responsibly.</p>	<p>How can music make you think and feel?</p> <p>☆☆ Music</p> <p>Creating media- Making music</p> <p>☆☆☆☆ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Using a computer as a tool to explore rhythms and melodies, before creating a musical composition</p>	<p>What is a branch database?</p> <p>☆☆ Science</p> <p>Data and Information</p> <p>Branching databases</p> <p>☆☆☆ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable</p> <p>☆☆ 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</p> <p>Building and using branching databases to group objects using yes/no questions.</p>	<p>What commands can you use?</p> <p>☆☆ Maths</p> <p>Programming A</p> <p>Repetition in shapes</p> <p>☆☆☆☆ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆☆☆ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆☆☆ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>☆☆ 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.</p> <p>Using a text-based programming language to explore count-controlled loops when drawing shapes.</p>	<p>What is a video?</p> <p>Creating media- Video editing</p> <p>☆☆☆☆ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆ 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.</p> <p>☆☆☆☆ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Planning, capturing, and editing video to produce a short film</p>	<p>What makes a good website?</p> <p>Creating media- Webpage creation</p> <p>☆☆☆☆ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆ 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.</p> <p>☆☆☆☆ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation</p>
Spring 1	<p>Data Collection;</p> <p>☆☆☆ – Collect information as photos or sound files.</p> <p>- Use a simple pictogram or set of photos to count and organise information.</p>	<p>How can we paint using computers?</p> <p>☆☆ Art and design</p> <p>Creating media- Digital Painting</p> <p>☆☆☆☆ Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.</p>	<p>How is the information technology (IT) being used for good in our lives?</p> <p>Computing systems and networks*- Information technology around us</p> <p>☆☆☆☆ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>☆☆☆☆ Recognise common uses of information technology beyond school.</p> <p>☆☆☆☆ 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.</p> <p>Identifying IT and how its responsible use improves our world in school and beyond.</p>	<p>How can I sequence sound?</p> <p>☆☆ Music</p> <p>Programming A- Sequencing sounds</p> <p>☆☆ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>☆☆ 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</p> <p>Creating sequences in a block-based programming language to make music.</p>	<p>What is input and output?</p> <p>☆☆ Music</p> <p>Creating media- Audio editing</p> <p>☆☆☆☆ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆ 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.</p> <p>☆☆ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Capturing and editing audio to produce a podcast, ensuring that copyright is considered.</p>	<p>What is physical computing?</p> <p>Programming A- Selection in physical computing</p> <p>☆☆ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆ 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.</p> <p>☆☆ 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.</p> <p>Exploring conditions and selection using a programmable microcontroller.</p>	<p>What variables could I choose?</p> <p>☆☆ Science</p> <p>Programming A- Variables in games</p> <p>☆☆ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>☆☆ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>☆☆ 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.</p> <p>☆☆ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Exploring variables when designing and coding a game.</p>

Spring 2		<p>What is data and information?</p> <p>Data and Information- Grouping data</p> <p>☆☆ ← ⚙ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>☆☆ ← ⚙ Recognise common uses of information technology beyond school</p> <p>Exploring object labels, then using them to sort and group objects by properties</p>	<p>What devices can be used to capture a photo?</p> <p>☆☆ Art and design</p> <p>Creating media- Digital photography</p> <p>☆☆ ← ⚙ Recognise common uses of information technology beyond school.</p> <p>☆☆ ← ⚙ Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Capturing and changing digital photographs for different purposes</p>	<p>Can a picture move?</p> <p>☆☆ Art and design</p> <p>Creating media- Stop-frame Animation</p> <p>☆☆ ← ⚙ 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</p> <p>☆☆ ← ⚙ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable</p> <p>Capturing and editing digital still images to produce a stop-frame animation that tells a story</p>	<p>How and why is data collected?</p> <p>☆☆ Maths</p> <p>Data and Information- Data logging</p> <p>☆☆ ← ⚙ Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>☆☆ ← ⚙ 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.</p> <p>Recognising how and why data is collected over time, before using data loggers to carry out an investigation.</p>	<p>How do you use a flat-file database?</p> <p>Data and Information- Flat-file databases</p> <p>☆☆ ← ⚙ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>☆☆ ← ⚙ 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</p> <p>Using a database to order data and create charts to answer questions</p>	<p>How do you create a spreadsheet?</p> <p>☆☆ Maths, Science, Geography</p> <p>Data and Information- Introduction to Spreadsheets</p> <p>☆☆ ← ⚙ 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.</p> <p>Answering questions by using spreadsheets to organise and calculate data.</p>
Summer 1		<p>How do I program a sprite?</p> <p>Programming B – Programming animations</p> <p>☆☆ 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.</p> <p>☆☆ ← ⚙ Use logical reasoning to predict the behaviour of simple programs.</p> <p>☆☆ ← ⚙ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>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</p> <p>Designing and programming the movement of a character on screen to tell stories.</p>	<p>What is data and how can it be collected?</p> <p>☆☆ Maths</p> <p>Data and Information- Pictograms</p> <p>☆☆ ← ⚙ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>☆☆ ← ⚙ Recognise common uses of information technology beyond school.</p> <p>Collecting data in tally charts and using attributes to organise and present data on a computer.</p>	<p>What is a text and image?</p> <p>☆☆ English – writing</p> <p>Creating media- Desktop publishing</p> <p>☆☆ ← ⚙ 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</p> <p>☆☆ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>Creating documents by modifying text, images, and page layouts for a specified purpose.</p>	<p>How do I change and edit a digital image?</p> <p>☆☆ Art and design</p> <p>Creating media- Photo Editing</p> <p>☆☆ ← ⚙ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>☆☆ ← ⚙ 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.</p> <p>☆☆ ← ⚙ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.</p>	<p>How do you use different drawing tools to help create images?</p> <p>Creating media- Vector drawing</p> <p>☆☆ ← ⚙ 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</p> <p>Creating images in a drawing program by using layers and groups of objects</p>	<p>How do I produce a 3D model on a computer?</p> <p>☆☆ Maths</p> <p>Creating media-3D Modelling</p> <p>☆☆ ← ⚙ 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.</p> <p>☆☆ ← ⚙ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Planning, developing, and evaluating 3D computer models of physical objects.</p>

Summer 2		<p>How do I create and edit text?</p> <p>Creating media- Digital writing</p> <p>  Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>  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</p> <p>Using a computer to create and format text, before comparing to writing non-digitally.</p>	<p>How do I create my own quiz?</p> <p>Programming B- Programming quizzes</p> <p>  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.</p> <p>  Use logical reasoning to predict the behaviour of simple programs.</p> <p>  Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>  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</p> <p>Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.</p>	<p>How can it move through the maze?</p> <p>Programming B – Events and actions in Programs</p> <p>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>  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</p> <p>Writing algorithms and programs that use a range of events to trigger sequences of actions.</p>	<p>How can I make this do it more than once?</p> <p>Programming B- Repetition in games</p> <p>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>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.</p> <p>Using a block-based programming language to explore count-controlled and infinite loops when creating a game.</p>	<p>What conditions should I choose?</p> <p>Programming B- Selection in quizzes</p> <p>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>  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</p> <p>Exploring selection in programming to design and code an interactive quiz.</p> <p>Exploring selection in programming to design and code an interactive quiz.</p>	<p>What is a micro:bit?</p> <p>Programming B- Sensing Designing</p> <p>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>  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.</p> <p>Sensing Designing and coding a project that captures inputs from a physical device</p>

Key

	Build – area of study that builds on previous area of learning		Revisit – spaced retrieval
	Link – area of study links to another curriculum area		New - Introduce new content