

	Year R					
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
CPD Training	<p><i>Computing in EYFS ensures that pupils enter Year 1 with a strong foundation, builds problem-solving abilities, encourages resilience and supports other areas of learning. By integrating computing into EYFS, pupils also begin to build their digital literacy and their understanding of e-safety.</i></p> <p>Overarching principles of EYFS:</p> <ul style="list-style-type: none"> Every child is a unique child, who is constantly learning and can be resilient, capable, confident and self-assured Children learn to be strong and independent through positive relationships Children learn and develop well in enabling environments with teaching and support from adults, who respond to their individual interests and needs and help them to build their learning over time. Children benefit from a strong partnership between practitioners and parents and/or carers. Importance of learning and development. Children develop and learn at different rates. The framework covers the education and care of all children in early years provision, including children with special educational needs and disabilities (SEND). <p>Understanding the World</p> <ul style="list-style-type: none"> Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension. 					
Computational thinking activities:	Teacher to choose from two Autumn themed activities which see the children explore patterns in Garlands Galore and/or create a leaf labyrinth		Three Spring themed activities see the children make a Rabbit run, create Junk scarecrows and explore sequencing whilst planting seeds.		Children explore their surroundings and get creative, take a journey and make a map, and discover seaside tangrams, in these three fun activities.	
Concepts & Approaches:	Creating, Pattern, Logic, Algorithms, Decomposition, Collaborating		Abstraction, Tinkering, Creating, Collaborating, Algorithms, Persevering, Decomposition		Tinkering, Persevering, Patterns, Logic, Decomposition, Debugging, Collaborating, Algorithms	
ELG Goal	<p>Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p> <p>Fine Motor Skills Use a range of small tools, including scissors, paint brushes and cutlery; Active Learning Respond to new experiences that you bring to their attention Creating and thinking critically Review their progress as they try to achieve a goal. Check how well they are doing.</p> <p>Mathematics 3 and 4 year olds – Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Reception – Continue, copy and create repeating patterns. Make patterns with varying rules (including AB, ABB and ABBC) and objects and invite children to continue the pattern.</p> <p>Understanding the world 3 and 4 year olds – Use all their senses in hands-on exploration of natural materials. Reception – Explore the natural world around them. 3 and 4 year olds – Begin to understand the need to respect and care for the natural environment and all living things. Reception – Understand the effect of changing seasons on the natural world around them. 3 and 4 year olds Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</p> <p>Building Relationships Work and play cooperatively and take turns with others;</p> <p>Gross Motor Skills Negotiate space and obstacles safely, with consideration for themselves and others;</p> <p>Playing and exploring Make independent choices. Do things independently that they have been previously taught. Respond to new experiences that you bring to their attention.</p>		<p>The Natural World Understand some important processes and changes in the natural world around them ,including the seasons and changing states of matter.</p> <p>Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Review their progress as they try to achieve a goal. Check how well they are doing. Share their creations, explaining the process they have used;</p> <p>Understanding the world 3 and 4 year olds – Plant seeds and care for growing plants. Begin to understand the need to respect and care for the natural environment and all living things. Reception – Understand the effect of changing seasons on the natural world around them.</p> <p>Expressive arts and design 3 and 4 year olds – Join different materials and explore different textures. Reception – Create collaboratively, sharing ideas, resources and skills.</p> <p>Building Relationships Work and play cooperatively and take turns with others;</p> <p>Active Learning Respond to new experiences that you bring to their attention</p> <p>Mathematics 3 and 4 year olds – Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</p>		<p>Active Learning Bring their own interests and fascinations into early years settings. Respond to new experiences that you bring to their attention. Begin to correct mistakes themselves.</p> <p>Creating and thinking critically Help children to extend their ideas through sustained discussion that goes beyond what they, and you, have noticed.</p> <p>Communication and Language Reception: Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. Reception: - Describe events in some detail. - Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.</p> <p>Mathematics Reception:- Count objects, actions and sounds. - Compare numbers Select, rotate and manipulate shapes to develop spatial reasoning skills</p> <p>Expressive Arts and Design Reception: Provide opportunities to work together to develop and realise creative ideas.</p> <p>Understanding the World Explore the natural world around them.</p>	
Key Questions; to prompt discussion use "I wonder why/how?"	<p>What do we need for this part? Which objects shall we choose? How did you make that? Can we check what we have done so far? Does anything need changing? What do you like about yours? I wonder how it could be better? Which objects are repeated? Which object is first? What do we need next? How do we know? Is that the same as...? Tell me about your work. Why did you put that there? I wonder what would happen if... What have you found out? How do you know that? Where will you start? Which path will you take? Why? Which path would be best? How do you know? Practitioners can model algorithmic thinking by 'thinking aloud' as they plan their path through the maze, e.g. Which way shall I go first? Where could I go next? Which path shall I take next? I think this would be best because...</p>		<p>What is the same? What is different about them? Which ones do you think look the best? Why? What colours are they wearing? Is the size / clothes colour important? What are you going to include in Try it. Have a go. What do you think (predict) will happen? What happened? Did that surprise you? Why? How can you join the pieces together? How will the head stay up? Will using this work? Why / Why not? What could you try next? Are there any parts of your scarecrow that could move, so that the birds think they are real? How might you do this? your scarecrow picture? Why? How did you make that? Show me what it does. What do you like about yours? Did you test it? How could it be better? What shall I do? Good idea, I will stuff the head with the straw. Who did you work with? Whose turn is it? Who will you work with to change this?</p>		<p>I wonder how many different colour/size / shape objects we can find? Can you find an object which is red/round etc? What do you notice about the objects we have collected? I wonder how many different coloured objects we have? Are any of the objects the same colour? Can you organise the objects into the different colour groups? Which colour do we have a lot of? Which colour do we have very little of? When I make a tower of these colours, which tower is the tallest? What does that mean? How many (yellow) objects do I have? Can you show me how to count? Can you show me how to make a tower of the object? In which tower do I place this object? I wonder which tower will have the most objects in when we finish... What did you see first / next / last? Should this one be placed before/ after ... on the map? Where did you go next and how did you get there? What was the last thing you did before you came home from your adventure?</p>	
Computing Vocabulary	in front of, behind, first, then, next		turn, change, join, together, move, test,		collect, organise, group, first, next last, before	

Topic and Coverage E-Safety	Project Evolve E-safety: Self-Image and Identity	Project Evolve E-safety: Online Bullying' Anti-Bullying Week', Monday 11th- Friday 15th November	Project Evolve E-safety: Online Relationships Safer Internet Day- 11.02.25	Project Evolve E-safety: Online Reputation	Project Evolve E-safety: Managing Online Information	Project Evolve E-safety: Privacy and Security
Disciplinary Knowledge	I can ask simple what, how and why e-safety questions. I can ask what I need to keep safe online, why I need to keep safe and how I can stay safe online?	I can ask simple what, how and why e-safety questions. I can ask what might be said online that may be unkind, why these words may upset someone and how I can ensure that I use kind words/ report unkind words?	I can ask simple what, how and why e-safety questions. I can ask what I might communicate online, why I might use technology to communicate and how can I use technology to communicate safely?	I can ask simple what, how and why e-safety questions. I can ask what I might be communicate online, why I might use technology to communicate and how can I use technology to communicate safely.	I can ask simple what, how and why e-safety questions. I can ask what might be communicated online, why I might use technology to communicate and how would I use different devices to find information online?	I can ask simple what, how and why e-safety questions. I can ask what personal information should I/should I not share, why might I want to share personal information and how can I share my personal information safely?
Trips / Visitors / Enrichment/ Links/ Community Engagement	Wellie Walks to school grounds or Corsham Park for signs of Autumn colours Wellie walk to War Memorial- looking at the poppy wreaths and the patterns in these. Corsham Story Town Story and Art work annual project Peacock Arts trail painting competition		Visits to appreciate Capability Brown's design of Corsham Park Link to scrapstore- how can we use junk for good? Lenten Act of Kindness for the community.		Visit from Pilot / Train Driver / Travel Agent to discuss travel Seaside tangrams- link to trip to Bristol Aquarium Using maps to go on a journey around their own community	
Assessment:	Project Evolve Baseline and End of Unit Assessment Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.					

Year 1						
Topic and Coverage in Computing	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Topic and Coverage in E-Safety	Project Evolve E-safety: Self-Image and Identity	Project Evolve E-safety: Online Bullying' <i>Anti-Bullying Week', Monday 11th-Friday 15th November</i>	Project Evolve E-safety: Online Relationships <i>Safer Internet Day- 11.02.25</i>	Project Evolve E-safety: Online Reputation	Project Evolve E-safety: Managing Online Information	Project Evolve E-safety: Privacy and Security
Disciplinary Knowledge I am thinking like a computer specialist....	I can ask simple what, how and why e-safety questions. I can ask what might be said online that may be unkind, why these words may upset someone and how I can ensure that I use kind words/ report unkind words?	I can ask simple what, how and why questions. E.g: How can I use a mouse and keyboard effectively, what can I use these skills for and why are these skills useful? What might I want to say online, why might I want to say something online and how should I say something online so as not to cause offence?	I can ask simple what, how and why questions. E.g: What are algorithms, why do I need to use precise instructions when programming and how can I create and debug simple programmes? What might I want to communicate online, why might I want to communicate something online and how could I communicate online with adult support?	I can ask simple what, how and why questions. E.g: How is digital art different to other forms of art, why is digital art used, what is digital art created with? I can ask what I might communicate online, why might I use technology to communicate and how can I use technology to communicate safely?	I can ask simple what, how and why questions. E.g: What information might I need to store, how will I create this and why do I need to store this? what I might search for online, why might I need to be cautious about how I search online and how can I use technology to search safely?	I can ask simple what, how and why questions. E.g: What are algorithms, why do I need to use precise instructions when programming and how can I create and debug simple programmes? I can ask simple what, how and why e-safety questions. I can ask what personal information should I/should I not share, why might I want to share personal information and how can I protect my personal information?
NC Objectives	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.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content 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.	<ul style="list-style-type: none"> 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 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. 	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.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content 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.	<ul style="list-style-type: none"> 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 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.
Skills: Computer Science Information Technology Digital Literacy	<ul style="list-style-type: none"> If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help I can recognise that there may be people online who could make someone feel sad, embarrassed or upset. 	To identify a computer and its main parts <ul style="list-style-type: none"> I can name the main parts of a computer I can switch on and log into a computer I can use a mouse to click and drag To use a keyboard to type on a computer <ul style="list-style-type: none"> I can say what a keyboard is for I can type my name on a computer I can save my work to a file To use the keyboard to edit text <ul style="list-style-type: none"> I can open my work from a file I can use the arrow keys to move the cursor I can delete letters I can describe how to behave online in ways that do not upset others and can give examples.	To explain what a given command will do <ul style="list-style-type: none"> I can predict the outcome of a command on a device I can match a command to an outcome I can run a command on a device To act out a given word <ul style="list-style-type: none"> I can follow an instruction I can recall words that can be acted out I can give directions To combine 'forwards' and 'backwards' commands to make a sequence <ul style="list-style-type: none"> I can compare forward and backward movements I can start a sequence from the same place I can predict the outcome of a sequence involving 'forwards' and 'backwards' commands To combine four direction commands to make sequences <ul style="list-style-type: none"> I can compare left and right turns I can experiment with 'turn' and 'move' commands to move a robot 	To appreciate digital art and make comparisons <ul style="list-style-type: none"> I can explain that pictures can be made in lots of different ways I can spot the differences between painting on a computer and on paper I can say whether I prefer painting using a computer or using paper I can recognise that information can stay online and could be copied. I can describe what information I should not put online without asking a trusted adult first. 	To label objects <ul style="list-style-type: none"> I can describe objects using labels I can match objects to groups I can identify the label for a group of objects To identify that objects can be counted <ul style="list-style-type: none"> I can count objects I can group objects I can count a group of objects To describe objects in different ways <ul style="list-style-type: none"> I can describe an object I can describe a property of an object I can find objects with similar properties <ul style="list-style-type: none"> I can give simple examples of how to find information using digital technologies, e.g. search engines, voice activated searching. I know / understand that we can encounter a range of things online including things we like and don't 	To choose a command for a given purpose <ul style="list-style-type: none"> I can find the commands to move a sprite I can use commands to move a sprite I can compare different programming tools To show that a series of commands can be joined together <ul style="list-style-type: none"> I can use more than one block by joining them together I can use a Start block in a program I can run my program To identify the effect of changing a value <ul style="list-style-type: none"> I can find blocks that have numbers I can change the value I can say what happens when I change a value To explain that each sprite has its own instructions <ul style="list-style-type: none"> I can show that a project can include more than one sprite

			<ul style="list-style-type: none"> ● I can predict the outcome of a sequence involving up to four commands <p>To plan a simple program</p> <ul style="list-style-type: none"> ● I can explain what my program should do ● I can choose the order of commands in a sequence ● I can debug my program <p>To find more than one solution to a problem</p> <ul style="list-style-type: none"> ● I can identify several possible solutions ● I can plan two programs ● I can use two different programs to get to the same place <ul style="list-style-type: none"> ● I can give examples of when I should ask permission to do something online and explain why this is important. ● I can use the internet with adult support to communicate with people I know (e.g. video call apps or services). 		like as well as things which are real or make believe / a joke.	<ul style="list-style-type: none"> ● I can delete a sprite ● I can add blocks to each of my sprites <p>To design the parts of a project</p> <ul style="list-style-type: none"> ● I can choose appropriate artwork for my project ● I can decide how each sprite will move ● I can create an algorithm for each sprite <p>To use my algorithm to create a program</p> <ul style="list-style-type: none"> ● I can use sprites that match my design ● I can add programming blocks based on my algorithm ● I can test the programs I have created <ul style="list-style-type: none"> ● I can explain how passwords are used to protect information, accounts and devices. ● I can recognise more detailed examples of information that is personal to someone (e.g. where someone lives and goes to school, family names). ● I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.
Computing Vocabulary	technology, safe, personal, information, private	technology, computer, mouse, trackpad, keyboard, screen, double-click, typing	Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program.	paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers	object, label, group, search, image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same	ScratchJr, command, sprite, compare, programming, area, block, joining, start, run, program, background, delete, reset, algorithm, predict, effect, change, value, instructions, design.
Trips / Visitors / Enrichment / Links Community Engagement	Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.	Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.	Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety.	'Big Me Week' links to using computing in careers. Newsletter links to online safety.	Art Exhibition- link to previous learning about digital art Newsletter links to online safety.	Newsletter links to online safety.
Assessment:	<p>Project Evolve Baseline and End of Unit Assessment</p> <p>Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>					

Year 2						
Topic and Coverage in Computing	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	History fieldwork session <i>Using 'Teaching Computing Unit 1' for guidance</i>	Geography Fieldwork Session <i>Using 'Teaching Computing Unit 2 for guidance</i>	<i>Robot algorithms</i> <i>Using 'Teaching Computing Unit 3' for guidance</i>	<i>Collecting and Presenting Data in Science (grouping materials)</i> <i>Using 'Teaching Computing Unit 4, lessons 1-3' for guidance</i>	Making Digital Music (Link to English) <i>Using 'Teaching Computing Unit 5 lesson 5' for guidance</i>	Programming Quizzes <i>Using 'Teaching Computing Unit 6' for guidance</i>
Topic and Coverage in E-Safety	Project Evolve E-safety: Self-Image and Identity	Project Evolve E-safety: Online Bullying* <i>Anti-Bullying Week', Monday 11th-Friday 15th November</i>	Project Evolve E-safety: Online Relationships <i>Safer Internet Day- 11.02.25</i>	Project Evolve E-safety: Online Reputation	Project Evolve E-safety: Managing Online Information	Project Evolve E-safety: Privacy and Security
Disciplinary Knowledge I am thinking like a computer specialist....	I can ask simple what, how and why questions. E.g: how is IT used in my local area?- How can this help me know which buildings are old/ new? How can I use a computer responsibly? I can ask simple what, how and why e-safety questions. I can ask what might people look like online, why might people act and look differently online and how can I get help/help others if they are upset or worried about something I/they see online?	I can ask simple what, how and why questions. E.g: What are the key landmarks in my area- how can photographs be used to document these? How can I take an effective photograph of a human or natural feature of my area? I can ask simple what, how and why e-safety questions. I can ask what might bullying look like online, why is someone who is bullied online never to blame and how can someone getting bullied online get support?	I can ask simple what, how and why questions. E.g: What are algorithms, why do I need to use precise instructions when programming and how can I create and debug simple programmes? I can ask what might I share about myself online, why I might communicate with someone I don't know and how can I communicate safely online?	I can ask simple what, how and why questions. E.g: What information might I need to store, how will I create this and why do I need to store this? I can ask simple what, how and why e-safety questions. I can ask what might be seen online, why does information stay online and how can I report something which has been put online that is incorrect?	I can ask simple what, how and why questions E.g: How is digital music made, why is technology used to create music, what programmes can I use to make digital music? what might someone put online that is make believe, why something might be true or false online and how do I know what is true/false online?	I can ask simple what, how and why questions. E.g: What are algorithms, why do I need to use precise instructions when programming and how can I create and debug simple programmes? What is my private information, why might I want to keep some information private and how can I use passwords to protect my information?
NC Objectives	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. Recognise common uses of information technology beyond school	Use technology purposefully to create, organise, store, manipulate and retrieve digital content 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.	<ul style="list-style-type: none"> 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	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	<ul style="list-style-type: none"> 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
Skills: Computer Science Information Technology Digital Literacy	<p>To recognise the uses and features of information technology</p> <ul style="list-style-type: none"> I can identify examples of computers I can describe some uses of computers I can identify that a computer is a part of IT <p>To identify information technology beyond school</p> <ul style="list-style-type: none"> I can find examples of information technology I can sort IT by where it is found I can talk about uses of information technology <p>To explain how to use information technology safely</p> <ul style="list-style-type: none"> I can list different uses of information technology I can talk about different rules for using IT I can say how rules can help keep me safe 	<p>To use a digital device to take a photograph</p> <ul style="list-style-type: none"> I can recognise what devices can be used to take photographs I can talk about how to take a photograph I can explain what I did to capture a digital photo <p>To make choices when taking a photograph</p> <ul style="list-style-type: none"> I can explain the process of taking a good photograph I can take photos in both landscape and portrait format I can explain why a photo looks better in portrait or landscape format <p>To describe what makes a good photograph</p> <ul style="list-style-type: none"> I can identify what is wrong with a photograph I can discuss how to take a good photograph I can improve a photograph by retaking it <p>To recognise that photos can be changed</p>	<p>To describe a series of instructions as a sequence</p> <ul style="list-style-type: none"> I can follow instructions given by someone else I can choose a series of words that can be acted out as a sequence I can give clear instructions <p>To explain what happens when we change the order of instructions</p> <ul style="list-style-type: none"> I can use the same instructions to create different algorithms I can use an algorithm to program a sequence on a floor robot I can show the difference in outcomes between two sequences that consist of the same instructions <p>To use logical reasoning to predict the outcome of a program</p> <ul style="list-style-type: none"> I can follow a sequence I can predict the outcome of a sequence I can compare my prediction to the program outcome <p>To explain that programming projects can have code and artwork</p> <ul style="list-style-type: none"> I can explain the choices that I made for my mat design 	<p>To recognise that we can count and compare objects using tally charts</p> <ul style="list-style-type: none"> I can record data in a tally chart I can represent a tally count as a total I can compare totals in a tally chart <p>To recognise that objects can be represented as pictures</p> <ul style="list-style-type: none"> I can enter data onto a computer I can use a computer to view data in a different format I can use pictograms to answer simple questions about objects <p>To create a pictogram</p> <ul style="list-style-type: none"> I can organise data in a tally chart I can use a tally chart to create a pictogram I can explain what the pictogram shows 	<p>To create music for a purpose</p> <ul style="list-style-type: none"> I can create a rhythm which represents a rainforest animal I've chosen I can create my rainforest animal's rhythm on a computer I can add a sequence of notes to my rhythm 	<p>To explain that a sequence of commands has a start</p> <ul style="list-style-type: none"> I can identify the start of a sequence I can identify that a program needs to be started I can show how to run my program <p>To explain that a sequence of commands has an outcome</p> <ul style="list-style-type: none"> I can predict the outcome of a sequence of commands I can match two sequences with the same outcome I can change the outcome of a sequence of commands <p>To create a program using a given design</p> <ul style="list-style-type: none"> I can work out the actions of a sprite in an algorithm I can decide which blocks to use to meet the design I can build the sequences of blocks I need <p>To change a given design</p> <ul style="list-style-type: none"> I can choose backgrounds for the design I can choose characters for the design I can create a program based on the new design

	<ul style="list-style-type: none"> I can explain how other people may look and act differently online and offline. I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help. 	<ul style="list-style-type: none"> I can apply a range of photography skills to capture a photo I can recognise which photos have been changed I can identify which photos are real and which have been changed I can explain what bullying is, how people may bully others and how bullying can make someone feel. I can explain why anyone who experiences bullying is not to blame I can talk about how anyone experiencing bullying can get help. 	<ul style="list-style-type: none"> I can identify different routes around my mat I can test my mat to make sure that it is usable <p>To design an algorithm</p> <ul style="list-style-type: none"> I can explain what my algorithm should achieve I can create an algorithm to meet my goal I can use my algorithm to create a program <p>To create and debug a program that I have written</p> <ul style="list-style-type: none"> I can test and debug each part of the program I can plan algorithms for different parts of a task I can put together the different parts of my program 			<p>To create a program using my own design</p> <ul style="list-style-type: none"> I can choose the images for my own design I can create an algorithm I can build sequences of blocks to match my design <p>To decide how my project can be improved</p> <ul style="list-style-type: none"> I can compare my project to my design I can improve my project by adding features I can debug my program
Computing Vocabulary	Information technology (IT), computer, barcode, scanner/scan	device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting,	instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition	more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing	music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit.	sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code.
Trips / Visitors / Enrichment / Links Community Engagement	Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Field work lesson looking at technology uses in Corsham	Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Field work lesson taking photographs or features and landmarks in Corsham.	Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety.	'Big Me Week' links to using computing in careers. Newsletter links to online safety.	Newsletter links to online safety. Performance of saved music to an audience.	Newsletter links to online safety.
Assessment:	<p>Project Evolve Baseline and End of Unit Assessment</p> <p>Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>					

	Year 3					
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Topic and Coverage in computing		<p>Stop Frame Animation (Link to Annunciation story)</p> <p>Using 'Teaching Computing Unit 2- Lessons 1 and 2' combined for guidance</p>	<p>Sequencing Sounds Using 'Teaching Computing Unit 3' for guidance</p> <p>Safer Internet Day- 11.02.25</p>	<p>Data and information – Branching databases (Categorising rocks and fossils)</p> <p>Using 'Teaching Computing Unit 4, lessons 1-3' combined for guidance</p>	<p>Creating Media- Desktop Publishing (Information Page on how plants grow)</p> <p>Using 'Teaching Computing Unit 5' for guidance</p>	<p>Events and Actions in Programs Using 'Teaching Computing Unit 6' for guidance</p>
Topic and Coverage in E-Safety	<p>Project Evolve E-safety: Self-Image and Identity</p>	<p>Project Evolve E-safety: Online Bullying' Anti-Bullying Week', Monday 11th- Friday 15th November</p>	<p>Project Evolve E-safety: Online Relationships Safer Internet Day- 11.02.25</p>	<p>Project Evolve E-safety: Online Reputation</p>	<p>Project Evolve E-safety: Managing Online Information</p>	<p>Project Evolve E-safety: Privacy and Security</p>
Disciplinary Knowledge	<p>I can ask simple what, how and why questions E.g : Why do we use the internet, how can it provide multiple services and what opportunities does it offer? What is 'online identity', how might someone represent themselves differently online and why someone might change their identify online?</p>	<p>I can ask simple what, how and why questions E.g: What programme can I use, how can I create a successful animation? What might appropriate behaviour look like online, why is someone who is bullied online never to blame and how might bullying behaviour look like online?</p>	<p>I can ask simple what, how and why questions E.g: How can I design a program, what do I want to debug and why do I need to achieve the goals I have set? What does it mean to know someone online, how do people with similar interests get together online and why is it important to be careful about who to trust online?</p>	<p>I can ask simple what, how and why questions E.g: What information might I need to store, how will I create this and why do I need to store this? How do I search online, what might people want to share about themselves and why might I need to get help when sharing something about myself online?</p>	<p>I can ask simple what, how and why questions E.g: What information might I need to present, how will I create this and why do I need to present this? how do I use key words in search engines, what the difference is between a belief, and opinion and a fact, and why I need to be cautious about what is true online.</p>	<p>I can ask simple what, how and why questions E.g: How can I design a program, what do I want to debug and why do I need to achieve the goals I have set? What are the age restrictions for the app/ website I am using, why are there age/ time restrictions suggested for online activities and how might spending too much time on technology have a negative impact?</p>
NC Objectives	<ul style="list-style-type: none"> Understand 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
Skills: Computer Science	<p>Using objectives below as discussions points: To recognise how digital devices can change the way that we work</p> <ul style="list-style-type: none"> I can explain how I use digital devices for different activities 	<p>To explain that animation is a sequence of drawings or photographs</p> <ul style="list-style-type: none"> I can draw a sequence of pictures I can create an effective flip book—style animation 	<p>To explore a new programming environment</p> <ul style="list-style-type: none"> I can identify the objects in a Scratch project (sprites, backdrops) I can explain that objects in Scratch have attributes (linked to) 	<p>To create questions with yes/no answers</p> <ul style="list-style-type: none"> I can investigate questions with yes/no answers I can make up a yes/no question about a collection of objects 	<p>To recognise how text and images convey information</p> <ul style="list-style-type: none"> I can explain the difference between text and images I can recognise that text and images can communicate messages clearly 	<p>To explain how a sprite moves in an existing project</p> <ul style="list-style-type: none"> I can explain the relationship between an event and an action I can choose which keys to use for actions and explain my choices

<p>Information Technology</p> <p>Digital Literacy</p>	<p>I can discuss how I can keep my personal information safe on these devices</p> <ul style="list-style-type: none"> ●I can recognise similarities between using digital devices and using non-digital tools ●I can suggest differences between using digital devices and using non-digital tools <p>To explain how a computer network can be used to share information</p> <ul style="list-style-type: none"> ●I can recognise different connections ●I can explain how messages are passed through multiple connections ●I can discuss why we need a network switch 	<ul style="list-style-type: none"> ●I can explain how an animation/flip book works <p>To relate animated movement with a sequence of images</p> <ul style="list-style-type: none"> ●I can predict what an animation will look like ●I can explain why little changes are needed for each frame ●I can create an effective stop-frame animation 	<ul style="list-style-type: none"> ●I can recognise that commands in Scratch are represented as blocks <p>To identify that commands have an outcome</p> <ul style="list-style-type: none"> ●I can create a program following a design and understand that each sprite is controlled by the commands I choose ●I can predict the coding blocks used to move a sprite ●I can match coding blocks to their actions <p>To explain that a program has a start</p> <ul style="list-style-type: none"> ●I can start a program in different ways ●I can create a sequence of connected commands ●I can explain that the objects in my project will respond exactly to the code <p>To recognise that a sequence of commands can have an order</p> <ul style="list-style-type: none"> ●I can explain what a sequence is ●I can combine sound commands ●I can order notes into a sequence <p>To change the appearance of my project</p> <ul style="list-style-type: none"> ●I can build a sequence of commands ●I can decide the actions for each sprite in a program ●I can make design choices for my artwork <p>To create a project from a task description</p> <ul style="list-style-type: none"> ●I can identify and name the objects I will need for a project ●I can relate a task description to a design ●I can implement my algorithm as code 	<ul style="list-style-type: none"> ●I can create two groups of objects separated by one attribute <p>To identify the attributes needed to collect data about an object</p> <ul style="list-style-type: none"> ●I can select an attribute to separate objects into groups ●I can create a group of objects within an existing group ●I can arrange objects into a tree structure <p>To create a branching database</p> <ul style="list-style-type: none"> ●I can select objects to arrange in a branching database ●I can group objects using my own yes/no questions ●I can test my branching database to see if it works 	<ul style="list-style-type: none"> ●I can identify the advantages and disadvantages of using text and images ●I understand how to use emojis respectfully online <p>To recognise that text and layout can be edited</p> <ul style="list-style-type: none"> ●I can change font style, size, and colours for a given purpose ●I can edit text ●I can explain that text can be changed to communicate more clearly <p>To choose appropriate page settings</p> <ul style="list-style-type: none"> ●I can explain what 'page orientation' means ●I can recognise placeholders and say why they are important ●I can create a template for a particular purpose <p>To add content to a desktop publishing publication</p> <ul style="list-style-type: none"> ●I can choose the best locations for my content ●I can paste text and images to create a magazine cover ●I can make changes to content after I've added it <p>To consider how different layouts can suit different purposes</p> <ul style="list-style-type: none"> ●I can identify different layouts ●I can match a layout to a purpose ●I can choose a suitable layout for a given purpose <p>To consider the benefits of desktop publishing</p> <ul style="list-style-type: none"> ●I can identify the uses of desktop publishing in the real world ●I can say why desktop publishing might be helpful ●I can compare work made on desktop publishing to work created by hand 	<ul style="list-style-type: none"> ●I can identify a way to improve a program <p>To create a program to move a sprite in four directions</p> <ul style="list-style-type: none"> ●I can choose a character for my project ●I can choose a suitable size for a character in a maze ●I can program movement <p>To adapt a program to a new context</p> <ul style="list-style-type: none"> ●I can use a programming extension ●I can consider the real world when making design choices ●I can choose blocks to set up my program <p>To develop my program by adding features</p> <ul style="list-style-type: none"> ●I can identify additional features (from a given set of blocks) ●I can choose suitable keys to turn on additional features ●I can build more sequences of commands to make my design work <p>To identify and fix bugs in a program</p> <ul style="list-style-type: none"> ●I can test a program against a given design ●I can match a piece of code to an outcome ●I can modify a program using a design <p>To design and create a maze-based challenge</p> <ul style="list-style-type: none"> ●I can make design choices and justify them ●I can implement my design ●I can evaluate my project
<p>Computing Vocabulary</p>	<p>digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets</p>	<p>animation, flip book, stopframe, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition</p>	<p>Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code</p>	<p>attribute, value, questions, table, objects, branching, database, objects, equal, even, separate, structure, compare, order, organise, selecting, information, decision tree.</p>	<p>text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits.</p>	<p>. motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions.</p>
<p>Trips / Visitors / Enrichment / Links/ Community Engagement</p>	<p>Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.</p>	<p>Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Videos created shared on Google classrooms for parents to see.</p>	<p>Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety. Link to programming in 'We The Curious' Trip</p>	<p>'Big Me Week' links to using computing in careers. Newsletter links to online safety.</p>	<p>Newsletter links to online safety.</p>	<p>Newsletter links to online safety.</p>
<p>Assessment</p>			<p>https://forms.office.com/Pages/ShareFormPage.aspx?id=DQSlkWdsW0yxEjajBLZtrQAAAAAAAAAANAARJB7BBUMOU1M0o1SU4zTEszQkRZRks1OFRHWktKMMy4u&sharetoken=3qnwSBYSLPg3zSVirhPw</p>		<p>https://www.stem.org.uk/resources/e-library/resource/522348/year-3-branching-databases</p>	<p>https://www.stem.org.uk/resources/e-library/resource/522349/year-3-programming-b-events-and-actions-programming</p>
<p>Project Evolve Baseline and End of Unit Assessment</p> <p>Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>						

Year 4						
Topic and Coverage-Computing	Term 1	Term 2 Creating media – Audio production (Groups to record weekly learning in RE) Using 'Teaching Computing Unit 2-Lessons 1, 2, 3' combined for guidance	Term 3 <i>Programming A – Repetition in shapes</i> Using 'Teaching Computing Unit 3' for guidance <i>Safer Internet Day- 11.02.25</i>	Term 4 <i>Science Field Trip- Photographing Habitats</i> Using 'Teaching Computing Unit 5, lesson 4' for guidance	Term 5 <i>Data Logging</i> (Link to science- liquid cooling over time) Using 'Teaching Computing Unit 4' for guidance	Term 6 Programming B- Repetition in games Using 'Teaching Computing Unit 6' for guidance
Topic and Coverage in E-Safety	Project Evolve E-safety: Self-Image and Identity	Project Evolve E-safety: Online Bullying' <i>Anti-Bullying Week', Monday 11th-Friday 15th November</i>	Project Evolve E-safety: Online Relationships <i>Safer Internet Day- 11.02.25</i>	Project Evolve E-safety: Online Reputation	Project Evolve E-safety: Managing Online Information	Project Evolve E-safety: Privacy and Security
Disciplinary Knowledge	I can ask simple what, how and why questions E.g : <i>Why do we use the internet, how can it provide multiple services and what opportunities does it offer?. I can ask how might my online and offline identities differ, what are the positive ways we can interact with each other online and why might people pretend to be someone else online?</i>	I can ask simple what, how and why questions E.g : <i>What do I want to record, why do I want to record this, how will I record it? What makes someone become upset by what they see online, how can people be bullied through and range of media and why do people need to think carefully about the content they post online?</i>	I can ask simple what, how and why questions E.g <i>What goals do I want to achieve in programming, how do the algorithms work which help me achieve my goals and how will I achieve these? What does it mean to know someone online, how might people with similar interests get together online and why is it important to consider who to trust with content online?</i>	I can ask simple what, how and why questions E.g <i>What do I want to photograph and why, and how will I take the most effective photograph for its purpose? What might be created about others online, why content may be created about others online and how do I find out accurate information about others online?</i>	I can ask simple what, how and why questions E.g <i>What do I want to measure and why, and how will I measure it using technology effectively? what ways are people encouraged to make purchases online, how do I search accurately online and why is it important to make my own judgements about the accuracy of online information?</i>	I can ask simple what, how and why questions E.g <i>What goals do I want to achieve in programming, why do I want to achieve these and how will I achieve these? What times can the use of technology be positive/negative, why might there be times or situations when I need to limit my use of technology and how can I use strategies for limiting my time on technology?</i>
NC Objectives	<ul style="list-style-type: none"> Understand 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
Skills: Computer Science Information Technology Digital Literacy	<p>To evaluate the consequences of unreliable content</p> <ul style="list-style-type: none"> I can explain that not everything on the World Wide Web is true I can explain why some information I find online may not be honest, accurate, or legal I can explain why I need to think carefully before I share or reshare content 	<p>To apply audio editing skills independently</p> <ul style="list-style-type: none"> I can record content following my plan I can review the quality of my recordings I can improve my voice recordings <p>To combine audio to enhance my podcast project</p> <ul style="list-style-type: none"> I can open my project to continue working on it I can arrange multiple sounds to create the effect I want I can explain the difference between saving a project and exporting an audio file <p>To evaluate the effective use of audio</p> <ul style="list-style-type: none"> I can listen to an audio recording to identify its strengths I can suggest improvements to an audio recording 	<p>To identify that accuracy in programming is important</p> <ul style="list-style-type: none"> I can program a computer by typing commands I can explain the effect of changing a value of a command I can create a code snippet for a given purpose <p>To create a program in a text-based language</p> <ul style="list-style-type: none"> I can use a template to draw what I want my program to do I can write an algorithm to produce a given outcome I can test my algorithm in a text-based language <p>To explain what 'repeat' means</p> <ul style="list-style-type: none"> I can identify repetition in everyday tasks I can identify patterns in a sequence I can use a count-controlled loop to produce a given outcome <p>To modify a count-controlled loop to produce a given outcome</p>	<p>To explain that images can be combined</p> <ul style="list-style-type: none"> I can experiment with tools to select and copy part of an image I can use a range of tools to copy between images I can explain why photos might be edited 	<p>To explain that a data logger collects 'data points' from sensors over time</p> <ul style="list-style-type: none"> I can recognise that a data logger collects data at given points I can identify the intervals used to collect data I can talk about the data that I have captured <p>To recognise how a computer can help us analyse data</p> <ul style="list-style-type: none"> I can view data at different levels of detail I can sort data to find information I can explain that there are different ways to view data 	<p>To develop the use of count-controlled loops in a different programming environment</p> <ul style="list-style-type: none"> I can list an everyday task as a set of instructions including repetition I can predict the outcome of a snippet of code I can modify a snippet of code to create a given outcome <p>To explain that in programming there are infinite loops and count-controlled loops</p> <ul style="list-style-type: none"> I can modify loops to produce a given outcome I can choose when to use a count-controlled and an infinite loop I can recognise that some programming languages enable more than one process to be run at once <p>To develop a design that includes two or more loops which run at the same time</p>

		<ul style="list-style-type: none"> I can choose appropriate edits to improve my podcast 	<ul style="list-style-type: none"> I can identify the effect of changing the number of times a task is repeated I can predict the outcome of a program containing a count-controlled loop I can choose which values to change in a loop <p>To decompose a task into small steps</p> <ul style="list-style-type: none"> I can identify 'chunks' of actions in the real world I can use a procedure in a program I can explain that a computer can repeatedly call a procedure <p>To create a program that uses count-controlled loops to produce a given outcome</p> <ul style="list-style-type: none"> I can design a program that includes count-controlled loops I can make use of my design to write a program I can develop my program by debugging it 			<ul style="list-style-type: none"> I can choose which action will be repeated for each object I can explain what the outcome of the repeated action should be I can evaluate the effectiveness of the repeated sequences used in my program <p>To modify an infinite loop in a given program</p> <ul style="list-style-type: none"> I can identify which parts of a loop can be changed I can explain the effect of my changes I can re-use existing code snippets on new sprites <p>To design a project that includes repetition</p> <ul style="list-style-type: none"> I can evaluate the use of repetition in a project I can select key parts of a given project to use in my own design I can develop my own design explaining what my project will do <p>To create a project that includes repetition</p> <ul style="list-style-type: none"> I can refine the algorithm in my design I can build a program that follows my design I can evaluate the steps I followed when building my project
Computing Vocabulary	internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback.	Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure.	image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.	data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.	Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate.
Trips / Visitors / Enrichment / Links/ Community Engagement	Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.	Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Videos created shared on Google classrooms for parents to see.	Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety.	'Big Me Week' links to using computing in careers. Newsletter links to online safety. Link to Longleat Trip- Could photos be taken here also?	Newsletter links to online safety.	Newsletter links to online safety.
Assessment			https://www.stem.org.uk/resources/elibrary/resource/522376/year-4-programming-repetition-shapes			
<p>Project Evolve Baseline and End of Unit Assessment</p> <p>Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>						

Year 5						
Topic and Coverage	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Topic and Coverage		<p>Creating media - Video production (Link to English- Recording Speeches) Using 'Teaching Computing Unit 2' for guidance</p>	<p>Programming A – Selection in physical computing Using 'Teaching Computing Unit 3' for guidance Safer Internet Day- 11.02.25</p>	<p>Data Analysis Link to Science question: How does distance from a light source affect how much light hits an object? Using 'Teaching Computing Unit 4, lesson 5' for guidance</p>	<p>Vector drawing (Link to shapes consolidation in maths) Using 'Teaching Computing Unit 5' for guidance</p>	<p>Programming B – Selection in quizzes Using 'Teaching Computing Unit 6' for guidance</p>
Topic and Coverage in E-Safety	<p>Project Evolve E-safety: Self-Image and Identity</p>	<p>Project Evolve E-safety: Online Bullying' <i>Anti-Bullying Week', Monday 11th- Friday 15th November</i></p>	<p>Project Evolve E-safety: Online Relationships <i>Safer Internet Day- 11.02.25</i></p>	<p>Project Evolve E-safety: Online Reputation</p>	<p>Project Evolve E-safety: Managing Online Information</p>	<p>Project Evolve E-safety: Privacy and Security</p>
Disciplinary Knowledge	<p>I can ask simple what, how and why e-safety questions. I can ask why and how can my online identity be copied, modified or altered and what are responsible online choices about creating an online identity?</p>	<p>I can ask simple what, how and why questions E.g : What do I want to record, why do I want to record this, how will I record it? How is online bullying different to bullying in the physical world, why is 'banter' perceived in different ways and how can people get help if they are being bullied online?</p>	<p>I can ask simple what, how and why questions E.g What goals do I want to achieve in programming and why, how do the algorithms work which help me achieve my goals? What are the different ways of communicating, why might some people say things online which could cause me harm, and how can I ensure I recognise this is not my fault?</p>	<p>I can ask simple what, how and why questions E.g What might I use to support my investigation, how will I use this and why is it/is it not the most effective way? Why might I search for information about an individual, how will I search for this information and what information will be the most accurate?</p>	<p>I can ask simple what, how and why questions E.g How will I create my drawing, what software will I use and why is this software the most effective? What is likely to be 'fake news', why someone might post something untrue (particularly commercials) and how might 'fake news' affect someone's emotions?</p>	<p>I can ask simple what, how and why questions E.g What goals do I want to achieve in programming and why, how do the algorithms work which help me achieve my goals? How can technology can affect my health and wellbeing, why some apps may request payment and how to ensure I balance my time on technology.</p>
NC Objectives	<ul style="list-style-type: none"> Understand 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
Skills: Computer Science Information Technology Digital Literacy	<p>To recognise why the order of results is important, and to whom</p> <ul style="list-style-type: none"> I can describe some of the ways that search results can be influenced I can recognise some of the limitations of search engines I can explain how search engines make money 	<p>To explain what makes a video effective</p> <ul style="list-style-type: none"> I can explain that video is a visual media format I can identify features of videos I can compare features in different videos I know what to do if I see any content online that makes me feel uncomfortable <p>To use a digital device to record video</p> <ul style="list-style-type: none"> I can identify and find features on a digital video recording device 	<p>To control a simple circuit connected to a computer</p> <ul style="list-style-type: none"> I can create a simple circuit and connect it to a microcontroller I can program a microcontroller to make an LED switch on I can explain what an infinite loop does <p>To write a program that includes count-controlled loops</p> <ul style="list-style-type: none"> I can connect more than one output component to a microcontroller I can use a count-controlled loop to control outputs 	<p>To explain that computer programs can be used to compare data visually</p> <ul style="list-style-type: none"> I can select an appropriate chart to visually compare data I can refine a chart by selecting a particular filter I can explain the benefits of using a computer to create charts 	<p>To create a vector drawing by combining shapes</p> <ul style="list-style-type: none"> I can identify the shapes used to make a vector drawing I can explain that each element added to a vector drawing is an object I can move, resize, and rotate objects I have duplicated 	<p>To explain how selection is used in computer programs</p> <ul style="list-style-type: none"> I can recall how conditions are used in selection I can identify conditions in a program I can modify a condition in a program <p>To relate that a conditional statement connects a condition to an outcome</p> <ul style="list-style-type: none"> I can use selection in an infinite loop to check a condition

		<ul style="list-style-type: none"> ●I can experiment with different camera angles ●I can make use of a microphone 	<ul style="list-style-type: none"> ●I can design sequences that use count-controlled loops <p>To explain that a loop can stop when a condition is met</p> <ul style="list-style-type: none"> ●I can explain that a condition is either true or false ●I can design a conditional loop ●I can program a microcontroller to respond to an input <p>To explain that a loop can be used to repeatedly check whether a condition has been met</p> <ul style="list-style-type: none"> ●I can explain that a condition being met can start an action ●I can identify a condition and an action in my project ●I can use selection (an 'if...then...' statement) to direct the flow of a program <p>To design a physical project that includes selection</p> <ul style="list-style-type: none"> ●I can identify a real-world example of a condition starting an action ●I can describe what my project will do ●I can create a detailed drawing of my project <p>To create a program that controls a physical computing project</p> <ul style="list-style-type: none"> ●I can write an algorithm that describes what my model will do ●I can use selection to produce an intended outcome ●I can test and debug my project 			<ul style="list-style-type: none"> ●I can identify the condition and outcomes in an 'if... then... else...' statement ●I can create a program that uses selection to produce different outcomes <p>To explain how selection directs the flow of a program</p> <ul style="list-style-type: none"> ●I can explain that program flow can branch according to a condition ●I can design the flow of a program that contains 'if... then... else...' ●I can show that a condition can direct program flow in one of two ways <p>To design a program that uses selection</p> <ul style="list-style-type: none"> ●I can outline a given task ●I can use a design format to outline my project ●I can identify the outcome of user input in an algorithm <p>To create a program that uses selection</p> <ul style="list-style-type: none"> ●I can implement my algorithm to create the first section of my program ●I can test my program ●I can share my program with others <p>To evaluate my program</p> <ul style="list-style-type: none"> ●I can identify ways the program could be improved ●I can identify the setup code I need in my program ●I can extend my program further
Computing Vocabulary	system, connection, digital, input, process, storage, output, search, search engine, refine, index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking	video, audio, camera, talking head, panning, close up, video camera, microphone, lens, mid-range, long shot, moving subject, side by side, angle (high, low, normal), static, zoom, pan, tilt, storyboard, filming, review, import, split, trim, clip, edit, reshoot, delete, reorder, export, evaluate, share	microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer	database, data, information, record, field, sort, order, group, search, value, criteria, graph, chart, axis, compare, filter, presentation.	vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflection	Selection, condition, true, false, count-controlled, loop, outcomes, conditional statement, algorithm, program, debug, question, answer, task, design, input, implement, test, run, setup, operator
Trips / Visitors / Enrichment / Links/ Community Engagement	Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.	Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Videos created shared on Google classrooms for parents to see.	Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety.	'Big Me Week' links to using computing in careers. Newsletter links to online safety.	Newsletter links to online safety.	Newsletter links to online safety.
Assessment						https://www.stem.org.uk/resources/elibrary/resource/522383/year-5-programming-b-selection-quizzes
<p>Project Evolve Baseline and End of Unit Assessment Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>						

	Year 6					
Topic and Coverage	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Topic and Coverage		<p>Creating media – Web page creation (creating a Page about the River Avon)</p> <p>Using 'Teaching Computing Unit 2- Lessons 1, 2, 4' combined for guidance</p>	<p>Programming A – Variables in Games</p> <p>Using 'Teaching Computing Unit 3' for guidance</p> <p>Safer Internet Day- 11.02.25</p>		<p>Data- Introduction to spreadsheets (link to maths)</p> <p>Using 'Teaching Computing Unit 4, lessons 1,2 and 6' for guidance</p>	<p>Using a microbit for secondary school transition</p> <p>Using 'Teaching Computing Unit 6' for guidance</p>
Topic and Coverage in E-Safety	<p>Project Evolve E-safety: Self-Image and Identity</p>	<p>Project Evolve E-safety: Online Bullying'</p> <p><i>Anti-Bullying Week', Monday 11th- Friday 15th November</i></p>	<p>Project Evolve E-safety: Online Relationships</p> <p><i>Safer Internet Day- 11.02.25</i></p>	<p>Project Evolve E-safety: Online Reputation</p>	<p>Project Evolve E-safety: Managing Online Information</p>	<p>Project Evolve E-safety: Privacy and Security</p>
Disciplinary Knowledge	<p>I can ask simple what, how and why e-safety questions. I can ask what is stereotyping, why can this be harmful and how can I challenge this safely online?</p>	<p>I can ask simple what, how and why questions E.g : What do I want to create, why do I want to create this for my intended audience, how will I ensure it is the most effective it can be? What are the different contexts of online bullying, how do I evidence online bullying and why do I need to share my evidence?</p>	<p>I can ask simple what, how and why questions E.g why do I want/need to achieve these aims in programming, how do the algorithms work which help me achieve my aims and what programmes are the most effective? What do others want to be shared about them online, why do I need to respect these decisions and how do I show respect for these decisions?</p>	<p>I can ask simple what, how and why e-safety questions. I can ask what do I want my online personality to look like, why do I need varying degrees on anonymity and how will I achieve this?</p>	<p>I can ask simple what, how and why questions E.g : What do I want to create, why do I want to create this for my intended audience, how will I ensure it is the most effective it can be? I can ask simple what, how and why e-safety questions. I can ask what is true on search engines, why some information could be illegal and how do I ensure I use search engines effectively?</p>	<p>I can ask simple what, how and why questions E.g why do I want/need to achieve these aims in programming, how do the algorithms work which help me achieve my aims and what programmes are the most effective? What is copyright, why do technologies have terms and conditions and how do I protect myself from scams?</p>
NC Objectives	<ul style="list-style-type: none"> Understand 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> Understand 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
Skills:	<p>To evaluate different methods of online communication</p> <ul style="list-style-type: none"> I can compare different methods of communicating on the internet I can decide when I should and should not share information online 	<p>To review an existing website and consider its structure</p> <ul style="list-style-type: none"> I can explore a website (https://wrt.org.uk/your-river/) I can discuss the different types of media used on websites I know that websites are written in HTML <p>To plan the features of a web page</p>	<p>To define a 'variable' as something that is changeable</p> <ul style="list-style-type: none"> I can identify examples of information that is variable I can explain that the way a variable changes can be defined I can identify that variables can hold numbers or letters 		<p>To create a data set in a spreadsheet</p> <ul style="list-style-type: none"> I can collect data I can suggest how to structure my data I can enter data into a spreadsheet <p>To build a data set in a spreadsheet</p> <ul style="list-style-type: none"> I can explain what an item of data is 	<ul style="list-style-type: none"> To understand how variables and inputs can be used on the micro:bit to create a sports counter To create an algorithm for a sport counter, and code, run and evaluate the use of the micro:bit to count activities To create a countdown timer on the micro:bit using variables
Computer Science						
Information Technology						

<p>Digital Literacy</p>	<ul style="list-style-type: none"> ●I can explain that communication on the internet may not be private ●I can explain how to report inappropriate content online 	<ul style="list-style-type: none"> ●I can recognise the common features of a web page ●I can suggest media to include on my page ●I can draw a web page layout that suits my purpose <p>To consider the ownership and use of images (copyright)</p> <ul style="list-style-type: none"> ●I can say why I should use copyright-free images ●I can find copyright-free images ●I can describe what is meant by the term 'fair use' ●I know how to use technology respectfully and responsibly when online <p>To recognise the need to preview pages</p> <ul style="list-style-type: none"> ●I can add content to my own web page ●I can preview what my web page looks like ●I can evaluate what my web page looks like on different devices and suggest/make edits. 	<p>To explain why a variable is used in a program</p> <ul style="list-style-type: none"> ●I can identify a program variable as a placeholder in memory for a single value ●I can explain that a variable has a name and a value ●I can recognise that the value of a variable can be changed <p>To choose how to improve a game by using variables</p> <ul style="list-style-type: none"> ●I can decide where in a program to change a variable ●I can make use of an event in a program to set a variable ●I can recognise that the value of a variable can be used by a program <p>To design a project that builds on a given example</p> <ul style="list-style-type: none"> ●I can choose the artwork for my project ●I can create algorithms for my project ●I can explain my design choices <p>To use my design to create a project</p> <ul style="list-style-type: none"> ●I can create the artwork for my project ●I can choose a name that identifies the role of a variable ●I can test the code that I have written <p>To evaluate my project</p> <ul style="list-style-type: none"> ●I can identify ways that my game could be improved ●I can use variables to extend my game ●I can share my game with others 		<ul style="list-style-type: none"> ●I can choose an appropriate format for a cell ●I can apply an appropriate format to a cell <p>To choose suitable ways to present data</p> <ul style="list-style-type: none"> ●I can produce a chart ●I can use a chart to show the answer to a question ●I can suggest when to use a table or chart 	<ul style="list-style-type: none"> ●To evaluate the effectiveness of the LED display on the micro:bit when used as a timer ●To modify a program using true and false statements and an if...else command ●To create an activity completion using a micro:bit counter and a micro:bit timer ●Compare different inputs on the micro:bit ●Define iteration ●Modify a program with count-controlled iteration ●Create a countdown program using count-controlled iteration ●Discuss how the game basketball is played and how movement is used ●Define a function ●Modify a program to gather data and visualise the data ●Create a program to gather the strength of a throw in basketball
<p>Computing Vocabulary</p>	<p>communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, oneway, two-way, one-to-one, one-to-many</p>	<p>website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed.</p>	<p>variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare</p>		<p>data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools</p>	<p>Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug</p>
<p>Trips / Visitors / Enrichment / Links/ Community Engagement</p>	<p>Online safety meeting for parents before the 'Meet the Teacher' meetings. Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety.</p>	<p>Alan MacKenzie videos for parents shared on Google Classrooms. Newsletter links to online safety. Videos created shared on Google classrooms for parents to see.</p>	<p>Online Safety talk from PSCO Shaun Redmond for pupils Newsletter links to online safety. Link to programming in 'We The Curious' Trip</p>	<p>'Big Me Week' links to using computing in careers. Newsletter links to online safety.</p>	<p>Newsletter links to online safety.</p>	<p>Newsletter links to online safety.</p>
<p>Assessment</p>			<p>https://www.stem.org.uk/resources/elibrary/resource/522390/year-6-programming-variables-games</p>		<p>https://www.stem.org.uk/resources/elibrary/resource/522389/year-6-data-introduction-spreadsheets</p>	
<p style="text-align: center;">Project Evolve Baseline and End of Unit Assessment Examples of learning from an 'expected' child stuck into Floor-book to show progression throughout the year.</p>						