

# Year 3 Computing Progression Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	<b>Create digital content (3.4 -4)(3.9 -5)/e-safety</b>	<b>Communication &amp; Networks(3.5 -6)/e-safety</b>	<b>Data &amp; Data Representation (3.3 – 3)(3.5 -4)(3.8 -3)/e-safety</b>	<b>Hardware &amp; Processing (3.7 -4)/ e-safety</b>	<b>Algorithms/ Programming &amp; Development (3,1 -6)/e-safety</b>	
Learning Objective (from DC Pro)	<ul style="list-style-type: none"> <li>• Uses technology with increasing independence to purposefully organise digital content. (AB)</li> <li>• Uses a variety of software to manipulate and present digital content: and information. (AL)</li> <li>• Talks about their work and make improvements to solutions based on feedback received. (EV)</li> </ul>	<ul style="list-style-type: none"> <li>• Navigates the web and can carry out simple web searches to collect digital content. (AL) (EV)</li> </ul>	<ul style="list-style-type: none"> <li>• Performs single criteria searches for information. (AL)</li> </ul>	<ul style="list-style-type: none"> <li>• Recognises and can use a range of input and output devices.</li> <li>• Understands the function of the main internal parts of basic computer architecture (AB) (DE)</li> </ul>	<ul style="list-style-type: none"> <li>• Designs simple algorithms using loops (AL)</li> <li>• Uses logical reasoning to predict outcomes.(AL)</li> <li>• Detects and corrects errors i.e. debugging, in algorithms. (AL)</li> <li>• Understands that algorithms are implemented on digital devices as programs. (AL)</li> <li>• Uses loops within programs (AL)</li> <li>• Uses logical reasoning to predict the behaviour of programs. (AL)</li> <li>• Detects and correct simple semantic errors i.e. debugging, in programs. (AL)</li> </ul>	
<b>Demonstrates use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online. (EV)</b>						
Skills		<ul style="list-style-type: none"> <li>• Know the term search engine'</li> <li>• Evaluate websites giving reasons for choices</li> <li>• Find specific information from a website</li> <li>• Enter the data into a data collection sheet</li> </ul>	<ul style="list-style-type: none"> <li>• Complete two record cards and give examples of a database</li> <li>• Choose the correct search terms from a variety of questions and enter into the database</li> <li>• Write a variety of questions, find the answers and then copy on the computer</li> <li>• Create a graph, copy and paste into Textease and answer all of the questions</li> </ul>	<ul style="list-style-type: none"> <li>• Know and use the terms, motherboard, CPU, RAM, power supply, hard drive</li> <li>• Identify input and output devices</li> </ul>	<ul style="list-style-type: none"> <li>• Understand and use different blocks to create pattern programs for sprites</li> <li>• Use the looks blocks to write programs for their names understanding the effect of using the blocks</li> <li>• Correctly follow four algorithms to program the shapes</li> <li>• Uses loops within programs (AL)</li> <li>• Uses logical reasoning to predict the behaviour of programs. (AL)</li> <li>• Detects and correct simple semantic errors i.e. debugging, in programs. (AL)</li> </ul>	
	<p><b>Copyright and ownership</b></p> <ul style="list-style-type: none"> <li>• I can explain why copying someone else's work from the internet without permission can cause problems.</li> <li>• I can give examples of what those problems might be.</li> </ul>	<p><b>Health, Well-being and Lifestyle</b></p> <ul style="list-style-type: none"> <li>• I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)</li> </ul>	<p><b>Online relationships/ Online bullying</b></p> <ul style="list-style-type: none"> <li>• I can describe ways people who have similar likes and interests can get together online.</li> <li>• I can give examples of technology specific platforms of communication (e.g. emojis, acronyms, text speak).</li> <li>• I can explain some risks of communicating online with others I don't know well.</li> <li>• I can explain how my and other people's feelings can be hurt by what is said or written online.</li> <li>• I can explain why I should be careful who I trust online and what information I can trust them with.</li> <li>• I can explain why I can take back my trust in someone or something if I feel nervous, uncomfortable or worried.</li> <li>• I can explain what it means to 'know someone' online and why this might be different from knowing someone in real life.</li> <li>• I can explain what is meant by 'trusting someone online'. I can explain why this is different from 'liking someone online'.</li> <li>• I can explain what bullying is and can describe how people may bully others</li> <li>• I can describe rules about how to behave online and how I follow them.</li> </ul>	<p><b>Online reputation</b></p> <ul style="list-style-type: none"> <li>• I can search for information about myself online.</li> <li>• I can recognise I need to be careful before I share anything about myself or others online.</li> <li>• I know who I should ask if I am not sure if I should put something online.</li> </ul>	<p><b>Privacy and security</b></p> <ul style="list-style-type: none"> <li>• I can give reasons why I should only share information with people I choose to and can trust. I can explain that if I am not sure or I feel pressured, I should ask a trusted adult.</li> <li>• I understand and can give reasons why passwords are important.</li> <li>• I can describe simple strategies for creating and keeping passwords private.</li> <li>• I can describe how connected devices can collect and share my information with others.</li> </ul>	<p><b>Self-image and identity</b></p> <ul style="list-style-type: none"> <li>• I can explain what is meant by the term 'identity'.</li> <li>• I can explain how I can represent myself in different ways online.</li> <li>• I can explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming; using an avatar; social media).</li> </ul>
Vocabulary	multimedia, presentations, alignment, brush size, repeats, reflections, green screening, amend, copy, paste	search tools, search engine, evaluate, data/collection, structured, fields	Questioning, database, construct, contribute, recording data, data logger, present data, record, fields, search/criteria, less than/more than, highlight, graph, axes, labels, most/least, altogether	devices, computer parts, desktop, laptop, motherboard, CPU, hard drive, RAM, power supply, input, output, device, data	sequence instructions, sequence debugging, test and improve, logo commands, sequence programming, blocks, sprite, background, looks, repeat. Loop, algorithm, flow diagram, debug, animate, wait, commands, timing, insert, modify	
<b>appropriate online communication, appropriate websites, owner, esafety rules, secure passwords, report abuse button,</b>						

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Ongoing skills	Create Digital Content	<b>General ICT Skills:</b> <ul style="list-style-type: none"> <li>To save and retrieve a piece of work.</li> <li>To open a file and save it in a new location.</li> <li>To print a piece of work.</li> </ul>	<b>General Graphics /Video Skills</b> <ul style="list-style-type: none"> <li>To copy an image.</li> <li>To rotate an image</li> <li>To resize an image</li> <li>To flip an image</li> <li>To create a repeating pattern</li> <li>To create a design for a purpose</li> </ul>	<b>General Sound Recording Skills</b> <ul style="list-style-type: none"> <li>To use software to record music and sounds</li> <li>To change sounds they have recorded</li> <li>To save, retrieve and edit sounds</li> </ul>	<b>Word Processing</b> <ul style="list-style-type: none"> <li>To change the font, size and colour of text.</li> <li>To use bold, italic and underline.</li> <li>To know how to undo and redo.</li> <li>To align text left, right, centre and justify and know to use them.</li> <li>To insert clipart or WordArt object and to manipulate it.</li> </ul>	<b>Presentation skills</b> <ul style="list-style-type: none"> <li>To create a presentation that moves from slide to slide and is aimed at a specific audience.</li> <li>To be able to combine text, images and sounds and show awareness of audience.</li> </ul>	<b>Internet Skills</b> <ul style="list-style-type: none"> <li>To print out a page from the internet.</li> <li>To use hyperlinks to move around a website.</li> <li>Find information by browsing a menu</li> <li>To add a page to favourites.</li> </ul>
	<b>e-safety</b>	<b>Managing online information</b> <ul style="list-style-type: none"> <li>I can use key phrases in search engines</li> <li>I can explain what autocomplete is and how to choose the best suggestion.</li> <li>I can explain how the internet can be used to sell and buy things.</li> <li>I can explain the difference between a 'belief', an 'opinion' and a 'fact'.</li> </ul>					

	<b>Computer Science</b>
	<b>Information Technology</b>
	<b>Digital Literacy</b>