



Computing Progression: EYFS and KS1

	Nursery	Reception	Year 1	Year 2
	<p>There are no direct links to Computing in the Development Matters Document, however Computing will be embedded throughout all areas of the EYFS curriculum.</p>			
Learning to be a Computer Scientist		<p>Personal, Social and Emotional Development: Give focussed attention to what the teacher says.</p> <p>I can use programmable toys.</p>	<p>I can understand how many everyday devices respond to commands.</p>	
	<p>Communication and Language: Understand a question or instruction that has two parts "Get yourcoat and wait at the door".</p> <p>I can follow very simple instructions given by a teacher.</p>	<p>Personal, Social and Emotional Development: Give focussed attention to what the teacher says.</p> <p>I can follow instructions involving several ideas or actions.</p>	<p>I can give and follow instructions using Forward and Backward commands (arrows) and the Go command, one at a time.</p>	<p>I can give, follow and complete an algorithm that uses directional language.</p>
		<p>Understanding the World: Draw information from a simple map.</p> <p>I can sequence a simple set of instruction in the correct order.</p>	<p>I can explore outcomes when instructions are given in a sequence.</p>	<p>I can give and follow an algorithm to make half and quarter turns left and right using a range of commands e.g. Left 90, Right 90 on TextTease Turtle.</p>
		<p>Understanding the World: Draw information from a simple map.</p> <p>I can give instructions.</p>	<p>I can give and write a simple sequence of instructions.</p>	<p>I can use recognised language to write an algorithm.</p>
		<p>Personal, Social and Emotional Development: Give focussed attention to what the teacher says.</p> <p>I can make a programmable toy move.</p>	<p>I can discuss/explore what will happen when instructions are given in a sequence.</p>	<p>I can create, test and debug an algorithm for a given purpose including moving and rotating.</p>





	Nursery	Reception	Year 1	Year 2
Learning to be a Creator	Understanding the World: Explore how things works. I can recognise a computer.		I know what each part of a computer does e.g. keyboard types etc.	
			I can switch on and shutdown a computer (including using log in).	I can use a computer's basic functions e.g. turn on/shut down, log on/off independently.
	Understanding the World: Explore how things works. I can move a mouse.		I can use a mouse accurately to open programs and drag objects.	
			I can save and open a file.	I can use basic computer skills e.g. saving work, use a folder.
			I can type on a keyboard.	I can type a simple document/email.
			I can select and edit text e.g. size, colour and font.	I can edit a simple document/email.
	Communication and Language: Understand a question or instruction that has two parts "Get your coat and wait at the door". I can say when something is still and when it moves.	Understanding the World: Understand the effect of changing seasons on the natural world around them. I know the difference between a digital image and a moving image.	I can use a digital camera to photograph or record a class activity.	I can create a digital video and export/upload the clips.
		Understanding the World: Understand the effect of changing seasons on the natural world around them. I can take a picture and video.	I can use images that I have taken within another software.	I can add and format an image.



	Nursery	Reception	Year 1	Year 2
Learning to be a Creator	<p>Understanding the World: Explore how things works.</p> <p>I can take a picture with support and play a recording with support.</p>	<p>Understanding the World: Understand the effect of changing seasons on the natural world around them.</p> <p>I can take a picture with support and play a recording with support.</p>		
			I can create a pictogram using the computer.	I can create and edit a range of simple graphs using a computer.
		<p>Understanding the World: Understand the effect of changing seasons on the natural world around them.</p> <p>I can experiment with digital painting/drawing.</p>	I can use a range of paintbrush sizes, colours and types when creating digital art.	I can use a range of tools in a computer program to reproduce a style of art.
			I can create shapes with different coloured outlines and fills.	I can change the shade of a colour for effect.
			I can use word processing programmes to create simple posters.	I can edit text in a word processor e.g. .word, publisher, PowerPoint.
				I can send and open an email.
			I can complete a search using a child friendly search engine under the supervision of adults.	I can understand what a search engine is and can use a child friendly search engine independently.



			I can explore a website by clicking on buttons, arrows, menus and hyperlinks.	I can use the Internet to find information for a topic, with support (Favourites file, hyperlinks set up by the teacher).
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	Nursery	Reception	Year 1	Year 2
Learning to be SMART – E-Safety			I can understand why my login has a password.	I can understand why a secure password is important and should be kept private.
			I can begin to understand that I leave a digital footprint when using the internet.	I can understand that the internet can be used to communicate with people all around the world.
	Understanding the World: Explore how things works. I can ask for help from an adult.	Communication and Language: Ask questions to find out more and to check they understand what has been said to them. I can ask for help when an unfamiliar box appears on a computer/iPad.	I know ways to be safe on the internet (SMART).	I know that people may not be who they say they are online.
		Communication and Language: Use talk to help work out problems and organise thinking and activities explain how things work and why they might happen. I can begin to understand the SMART rules and why we have them.	I can understand the SMART rules and why we have them.	I can remember and explain the SMART rules.
		Understanding the World: Explore how things works. I can use devices that may have the internet with support.	I can use the internet to explore.	I can use the internet to research a given topic.
			I can begin to understand what cyberbullying is and know how to protect myself with the SMART rules.	I can write clear and respectful messages when communicating online.



Computing Progression: KS2

	Year 3	Year 4	Year 5	Year 6
Learning to be a Computer Scientist	I can explain how simple algorithms work and begin to spot errors by testing.	I can explain how simple algorithms work and spot errors by extensively testing.	I can begin find the relevant part of an algorithm to debug using decomposition.	I can find the relevant part of an algorithm to debug using decomposition.
	I can create and debug an algorithm using the move, rotate and repeat commands.	I can create and debug an algorithm using the move, rotate and repeat commands with the intention of meeting a specific goal.	I can create a program with a purpose that can be controlled by an end-user using input and output systems.	I can use a range of programming language to write purposeful programs and explain the systems that enable it to function.
		I can create and use variables to store relevant information.	I can test and edit my program by altering variables e.g. speed, score target to alter the outcome.	I can use logical reasoning to detect and correct a range of errors including logical, semantic and syntax errors and explain why the error occurred.
	I can create and debug algorithms that draw regular polygons and patterns,	I can create a procedure to draw regular polygons or patterns using the skills of sequence, selection and repetition.	I can begin to use decomposition to break a complex program into a series of manageable procedures and functions.	I can solve problems by using decomposition to break a complex program into a series of manageable procedures and functions.
	I can realise the importance of accurate instructions.	I can apply my knowledge regarding accurate instructions to ensure algorithms function properly.	I can apply my knowledge of accuracy to ensure my procedures interact as expected.	I can apply my knowledge of accuracy to ensure my procedures interact as expected and debug to ensure expected outcome.



	Year 3	Year 4	Year 5	Year 6
Learning to be a Creator	I can use basic computer skills e.g. save, open etc.	I can keep my files organised with relevant filenames.		
	I can use the CTRL key to use key commands.			
	I can edit text by changing case, aligning, using bullet points/ numbers.	I can edit and enhance images and text to make them more presentable.	I can digitally alter and manipulate images.	
	I can insert and format text boxes.	I can create a document/ presentation including images, word art etc.		
	I can lay out a page effectively by inserting, ordering and grouping objects as well as formatting.	I can arrange and layer objects including titles and backgrounds.		
	I can understand how a search engine works and how word order can effect search results.	I can use a search engine to find relevant and reliable information using key search words e.g. "" and NOT/-.	I can use a range of search engines and am beginning to use keywords effectively.	I can use a range of search engines and keywords effectively to find reliable information.
				I can explain how the internet/ the cloud works and how its services are used around the world e.g. communication, as well as explain the acronym WWW.
	I can create a hyperlink to a reliable/saved page.	I can use hyperlinks in my work to reference a reliable/saved page.	I can create a simple webpage by inserting images, heading and hyperlinks.	



	Year 3	Year 4	Year 5	Year 6
Learning to be a Creator			I can explore 3D modelling using a range of concrete and computer methods e.g. plasticine, SketchFab.	
			I can create a simple animation using 3D models and gradual changes.	
	I understand the principles of animation and create an animation using gradual frame changes.	I can create and edit video footage and add titles, audio/soundtracks and transitions to make it presentable.	I can edit the raw animation footage to create a presentable end product.	I can edit raw footage to create a purposeful digital film/ presentation by adding audio and a soundtrack to make it impactful.
	I can present data effectively using a range of software.	I can collect, analyse and present data accurately.	I can store and edit information in a spreadsheet using simple formulae with support.	I can store and edit information in a spreadsheet using formulae independently.
			I can understand the benefits of using a spreadsheet to process and view data.	I can process information using formulae to answer questions about a dataset.
		I can use timing on a presentation.		



	Year 3	Year 4	Year 5	Year 6
Learning to be SMART – E-safety	I can understand that my accounts and passwords keep my information safe and private.	I can create a secure password using capital letters, numbers and symbols.	I know that if I share my passwords online or access unsecure sites then I put my information at risk.	I know all the ways to keep my account secure and that my account name should not be associated with my real name.
	I can understand the term identity theft and know how to protect myself.	I can understand what is meant by spam and how we should protect ourselves from it.	I can understand that not all websites are secure and to understand what a privacy policy/seal is.	I can understand that that are identity theft scams online and how that information may be used.
	I know who/where to go to when I have concerns.	I can explain what to do if I am worried online and know about CEOPS.	I know that I should talk to an adult I trust or CEOPs if I feel worried.	I know the risks of being online and can identify when I need help and support.
	I can explain the SMART rules and apply them to actual situations.	I can explain the SMART rules and give examples for each situations.	I can apply the SMART rules to a range of situation and point out when a situation is dangerous.	I can link the SMART rules to social media usage and know what is and isn't acceptable online.
	I can begin to understand what it means to be a good digital citizen.	I can understand what it means to be a good digital citizen.	I can begin to understand the dangers of social media.	I can stay safe when using interactive technologies such as online games and social media.
	I can understand the effect of cyberbullying and know what to do if I experience this.	I can understand what it meant by plagiarism and the consequences of plagiarising.	I can compare cyberbullying to in-person bullying and learn strategies for coping with it.	I can understand the need to have a positive online persona to maintain professional relationships and that once something is online it can't be taken back.