

YEAR 2	Computer Science	Information Technology	Digital Literacy
	Understand that algorithms are implemented as programs on digital devices	Use technology purposefully to organise digital content	Use technology respectfully
	<p>Explore the effects of changing simple variables in models and simulations, asking 'What if?' questions. (S&SM)</p> <p>Talk about rules found in simulations and how these affect choices. (S&SM)</p> <p>Interpret and draw conclusions from graphs, discuss information contained and answer simple questions. (DH)</p> <p>Use basic search tools in a prepared database to answer simple questions.(DH)</p> <p>Know that users can develop their own programs, and can demonstrate this by creating a simple program in an environment that does not rely on text e.g. programmable robots etc.</p> <p>Understand that algorithms are implemented on digital devices as programs. Design simple algorithms using loops, and election i.e. if statements. Use logical reasoning to predict outcomes. Detect and correct errors i.e. debugging, in algorithms.</p> <p>Recognise that a range of digital devices can be considered a computer.</p>	<p>Select appropriate images and sounds to add to work. (TM)</p> <p>Select text using an appropriate method and make simple changes e.g. colour, style and size.(TM)</p> <p>Word process short texts, working directly at the computer rather than 'copying up' written work.(TM)</p> <p>Create simple presentations for different purposes using templates for support.(TM)</p> <p>Independently enter, save, print, retrieve and amend work.(TM)</p> <p>Create a sequence of images to form a short Animation.(IVA)</p> <p>Independently enter save and retrieve work (IVA)</p> <p>Create and edit sounds and musical phrases for a purpose(S)</p> <p>Independently save and retrieve sound files. (S)</p> <p>Sort and classify groups of items by asking simple yes / no questions. (DH)</p> <p>Use a branching database program, where appropriate, to sort and identify items. (DH)</p> <p>Use basic search tools in a prepared database to answer simple questions.(DH)</p> <p>Recognise different types of data: text, number.</p> <p>Appreciate that programs can work with different types of data. Recognise that data can be structured in tables to make it useful.</p> <p>Navigate the web and can carry out simple web searches to collect digital content.</p> <p>Use technology with increasing independence to purposefully organise digital content.</p>	<p>Begin to use webcams and /or video conferencing as a class.(EC)</p> <p>Send an email, using a subject heading, to a known member of the school community, e.g. another class, teacher, bursar. (EC)</p> <p>Open and reply to an email from a known person. (EC)</p> <p>Contribute to a blog, journal or forum on the school's website(EC)</p> <p>Develop an awareness of appropriate language to use in email and other forms of digital communication. (EC)</p> <p>Use appropriate strategies for finding, critically evaluating, validating and verifying information. (DR)</p> <p>Recognise what is acceptable and unacceptable behaviour when using technologies and online services.</p> <p>To understand to stay safe online by choosing sites that are good for them to visit avoiding sites that are inappropriate.</p> <p>To learn that the information they put online leaves a digital footprint.</p> <p>Understand that searching with key words is an effective way to locate information on the internet. How can key words be selected to produce the best results?</p>
	Understand that programs execute by following precise and unambiguous instructions		
	<p>Plan, generate and follow a sequence of commands to complete a task of problem e.g. reproduce a simple geometric shape or pattern on screen (L&C)</p> <p>Make predictions when controlling devices and describe the effects (L&C)</p> <p>Make changes to improve the effectiveness of commands (L&C)</p> <p>Explore the effects of changing simple variables in models and simulations, asking 'What if?' questions. (S&SM)</p> <p>Talk about rules found in simulations and how these affect choices. (S&SM)</p>		

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	<p>Debug simple programs</p>	<p>Select appropriate images and sounds to add to work.(TM)</p> <p>Select text using an appropriate method and make simple changes e.g. colour, style and size.(TM)</p> <p>Navigate around text in a variety of ways (mouse, arrow keys) when editing work.(TM)</p> <p>Create simple presentations for different purposes using templates for support.(TM)</p> <p>Use and understand editing tools e.g. cropping to change and refine an image.(IVA)</p> <p>Upload images and movies to a computer with support if needed (IVA)</p> <p>Create a sequence of images to form a short animation.(IVA)</p> <p>Create and edit sounds and musical phrases for a purpose. (S)</p> <p>Use basic editing tools to change recorded sounds e.g. speed up, slow down, reverse, echo. (S)</p> <p>Independently save and retrieve sound files. (S)</p> <p>Interpret and draw conclusions from graphs, discuss information contained and answer simple questions. (DH)</p> <p>Sort and classify groups of items by asking simple yes / no questions. (DH)</p>	<p>Begin to use webcams and /or video conferencing as a class.(EC)</p> <p>Send an email, using a subject heading, to a known member of the school community, e.g. another class, teacher, bursar. (EC)</p> <p>Open and reply to an email from a known person. (EC)</p> <p>Contribute to a blog, journal or forum on the school's website. (EC)</p> <p>Develop an awareness of appropriate language to use in email and other forms of digital communication. (EC)</p> <p>Locate specific, teacher defined, age appropriate websites through a favourites menu and /or by typing a website address (URL) into the address bar in a web browser. (DR)</p> <p>Using key words search a specific resource for information, under the guidance and supervision of an adult.(DR)</p> <p>Demonstrate use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online.</p> <p>Show an awareness for the quality of digital content</p>
	<p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Use a branching database program, where appropriate, to sort and identify items. (DH)</p> <p>Use basic search tools in a prepared database to answer simple questions.(DH)</p> <p>Make use of graphics, video and sound to enhance text in multimedia work(TM)</p> <p>Be aware that data can be captured through independent use of various peripheral devices, e.g. thermometers, microscopes and microphones. (DL)</p> <p>Recognise and can use a range of input and output devices.</p>	
	<p>Make predictions when controlling devices and describe the effects.(L&C)</p> <p>Make changes to improve the effectiveness of commands.(L&C)</p> <p>Explore the effects of changing simple variables in models and simulations asking 'what if?' questions (S&SM)</p>		

YEAR 2			Use a variety of software to manipulate and present digital content: data and information. Share their experiences of technology in school and beyond the classroom. Talk about their work and make improvements to solutions based on feedback received.		
	Key for Lancashire Progressions:	TM = Text & Multimedia	IVA = Images, Video & Animation	S = Sound	EC = Electronic Communication
	DR = Digital Research	DH = Data Handling	DL = Data Logging	LC = Logo & Control	SSM = Simulations & Spreadsheet modelling