Computing Progression at Meanwood C of E Primary School

CURRICULUM SUBJECT:	Computing	SUBJECT LEAD:	Kathryn Monk

What are the Y6 end of school end goals?	• To be confident and independent users of different technologies • To be responsible users of the internet and make choices for their own safety online • To be able to write and present using a range of multimedia • To be digitally literate in technologies available • To be able to problem solve when coding, testing, fixing and debugging programs • To be able to utilise new technology

How is the curriculum at Meanwood C of E Primary School sequenced towards these end points?

EYFS

Term 1	Term 2	Term 3
Take a photo on the iPad linked to topic learning. Two PCs with games linked to learning across the curriculum. Listening corner Battery operated toys (till, vehicles) Play interactive games on IWB	Take a photo on the iPad linked to tipc learning. Use a mouse with increased control. Listening corner Bee Bots Play interactive games on the IWB Voice recording buttons	Use the camera on an iPad to distort an image (app) Take videos on the iPad Use a mouse with increased control Listening corner Bee Bots Type first name on keyboard Play interactive games on the IWB

Year 1		Year 2	
Information Technology	**Technology Around us** • Identify: technology, a computer and its main parts, using a mouse and keyboard, typing and editing text • Using Technology safely **Data and Information – Grouping Data** • To label objects, count them and group them in different ways depending on their properties • Compare groups of objects and answer questions about them	**Information Technology**	**IT Around us** • Recognise and Identify: features of Information Technology, uses in school and beyond • How IT helps us • Using Information Technology safely and making the correct choices when using **Data and Information – Pictograms** • Recognise and use tally charts and pictograms • Use tally charts to create pictograms • Create pictograms to organise data and ask questions to make comparisons • Recognise that people can be described by attributes • Explain how we can present information on a computer

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Digital Literacy	**Digital Painting** • Use a digital painting tools to create digital paintings that include freehand, line and shape elements • Make choices about which element to use to create own painting and compare to painting on paper **Digital Writing** • Use a computer to add/remove text • Select and change the look of the text • Make choices about the look of the text and 'undo' changes • Explain why choices have been made and how this compares to writing on paper	**Digital Literacy**	**Digital Photography** • Use a digital device to take photos • Identify how to make choices when taking a photograph and how it can be improved • Use tools to change an image and identify if images have been changed **Digital Music** • Identify how music makes us feel • Identify patterns in music • Experiment with patterns on a computer using pitch • Create a sequence of notes to a rhythm • Review and refine music
Computer Science	**Programming a robot** • Describe and act out a sequence of commands • Programming a robot to undertake a sequence of commands • Plan own program, program it and suggest alternatives **Programming animations in ScratchJr** • Choosing a command for purpose and joining commands together • Identify effects of changing a value • Create different sprites with own instructions • Design project deciding on artwork, sprites and how they will move • Program, test and debug	**Computer Science**	**Robot algorithms** • Describe a sequence of instructions for a robot and explain what happens if we change the order • Predict the outcome of a program • Explain how this relates to programming • Design, code and debug a robot algorithm **Programming Quizzes in ScratchJr** • Explaining how to start a program, that a sequence of commands has an outcome • Create a program given a design deciding which blocks to use • Change a design – backgrounds, characters and actions • Build own design and explain how it can be improved
Year 3		**Year 4**	
Digital Literacy	• Send and receive emails • Personalise VLE • Individual blog • Search Engines – search using keywords, answer questions and find facts • Research basic facts for a presentation on a subject • E-safety – reliability of information and who to tell • Self-learning modules on VLE	**Digital Literacy**	• Email – sending and acting on instructions • Contribute to the class blog and review others work • Contribute to class discussion Groups • Research specific information for fact files • Google maps/earth – length of journeys, modes of transport, key sites • E-safety – digital footprint, what information you should keep safe • Following 'how to' instructions • How the internet works

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Information Technology	• Word – WordArt, picture formatting • PowerPoint – structure and layout of presentations, backgrounds and transitions • MSPaint – using shapes to create games characters • Stop Frame animation	**Information Technology**	• Word – borders, page colour, focus on presentation and layout • PowerPoint – animations, transitions and consideration of target audience • Excel – using, creating formulae for a range of purposes, presenting numeric data as graphics • MSPaint – following instructions to create an animal
Computer Science	• Scratch - Introduction to Scratch, sequencing, animations and pattern drawing	**Computer Science**	• Scratch - following programming instructions, programming for a purpose. Using Variables, selection and repetition.
Year 5		**Year 6**	
Digital Literacy	• Email collaboration • Contribute full answers to a discussion group that can help others • How search engines work and results ranked. Undertaking advanced searches • Narrowing down research on a wide topic to specific subjects and providing structured information • E-Safety – keeping personal information safe and reporting concerns. 4 c's of internet safety – conduct, contact, content and commerce • Self-learning via BBC bitesize	**Digital Literacy**	• Searching for quality information to be used in other subjects to include key words • E-Safety – keeping safe on social media, showing respect and keeping within the law • Computer hardware/software
Information Technology	• Word – text boxes. Focussing on graphic design principles. Manipulating images. • PowerPoint – hyperlinks and back buttons • Databases – creating and populating a database, with records, field names and field values. Querying a database	**Information Technology**	• Word – combining principles and other compatible technologies. Use of templates and layering text, shapes and images • PowerPoint – Using SmartArt to create a hierarchical structured slideshow. Interactive advent calendar • MSPaint – creating a pattern that can be copied to Word to make wallpaper • Word and PowerPoint will be used in Digital Literacy lessons to present information searched for on the internet. • 3D modelling
Computer Science	• Scratch – system variables, broadcasting, planning and coding, testing and debugging a game independently	**Computer Science**	• Scratch – writing music, using lists to hold information decomposing a program and writing it better • HTML/CSS/JavaScript – how web pages are set up. Basic tags in HTML, defining styles in CSS and writing a JavaScript function

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