Computing at The Mead Primary School

Year group	T1	T2	T3	T4	T5	T6
Nursery	Opportunities to explore technology eg turning on CD player, using a remote control, use the class touch screen with support to choose programmes Use technological toys with knobs or pulleys, and real objects such as cameras Use iPads to take photos Have access in the continuous provision to toys which work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images Plays with a range of materials to learn cause and effect, such as reading and making lift the flap pages					
YR	Develop digital literacy skills by being able to access, understand and interact with a range of technologies such as iPads, cameras and electronic toys Use the internet with adult supervision to find and retrieve information of interest to them, such as looking at Google Earth		Develops digital literacy skills by being able to access, understand and interact with a range of technologies such as iPads, cameras and electronic toys Complete a simple program on an iPad to support key skills, such as phonics play games		Create content such as drawing a picture on the interactive screen	
Y1	**Computing systems and networks - Technology all around us** *Understand what technology is and how it can help us. Become familiar with the different components of a computer and consider how to use technology responsibly*	**Creating media – Digital painting** *Explore the world of digital art and its exciting range of creative tools.*	**Programming A – Moving a robot** *Identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. Introduction to algorithms.*	**Data and Information – Grouping data** *Demonstrate objects can be sorted into different groups, based on chosen properties to answer questions about data.*	**Creating media – digital writing** *Understand the various aspects of using a computer to create and change text. Type on a keyboard and begin using tools to change the look of their writing.*	**Programming B – Introduction to animation** *Introduction to on-screen programming using Scratch Jnr.*
Y2	**Computers and networks – IT around us** *Know how information technology (IT) is used in our lives. Make smart choices when using IT*	**Creating Media – Digital photography** *Recognise that different devices can be used to capture photographs and gain experience capturing, editing, and improving photos.*	**Programming A – Robot algorithms** *Develop an understanding of instructions in sequences. Design algorithms and then test those algorithms as programs and debug them.*	**Data Information – Pictograms** *Begin to understand what data means and how this can be collected in the form of a tally chart. Present data in the form of pictograms and*	**Creating Media – Making music** *Explore how music can make them think and feel. Make patterns and use them to make music with both percussion instruments and digital tools.*	**Programming B – An introduction to quizzes** *Develop Scratch learning by understanding sequences of commands to create their own quiz questions.*

				block diagrams. Use data to answer questions.		
Y3	**Computing systems and networks –Connecting computers** *Know what digital devices are. Understand how inputs, processes and outputs work together. Know how devices work together to create a network*	**Creating Media – Stop - frame animation** *Use a range of techniques to create a stop-frame animation using iPads, adding music and text.*	**Programming A – Sequencing sounds in music** *Explore the concept of sequencing in programming through Scratch. Introduction to a selection of motion, sound, and event blocks to create their own programs, featuring sequences*	**Data Information - Branching databases** *Develop an understanding of what a branching database is and how to create one. Create physical and on-screen branching databases. Consider real-world applications for branching databases*	**Creating Media - Desktop publishing** *Use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Add text and images to create their own pieces of work. Evaluate how and why desktop publishing is used in the real world.*	**Programming B – Events and actions in programming** *Develop links with events and actions to create more complex instructions for sprites on Scratch.*
Y4	**Computing systems and networks –The internet** *Know what the internet is. Decide if online content is honest, accurate or reliable. Begin to understand the consequences of false information.*	**Creating Media – Audio editing** *Discuss the ownership of digital audio and the copyright implications of duplicating the work of others. Use Soundation to produce a podcast, including editing, adding multiple tracks*	**Programming A – Repetition in shapes** *Create programs using Logo, a text-based programming language. Plan, modify, and test commands to create shapes and patterns with repetition and loops within programming.*	**Data Information -Data logging** *Consider how and why data is collected over time. Collect data as well as access data captured over long periods of time and use the data to answer questions.*	**Creating Media Photo editing** *Develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused. Consider the impact that editing images can have and evaluate the effectiveness of their choices.*	**Programming B – Repetition in games** *Explore concept of repetition in games, building up to creating own game using repetition in programming design.*
Y5	**Computing systems and networks – Sharing information** *Know how information transferred between systems and devices. Understand how search engines select and rank results.*	**Creating media – Video production** *Learn how to create short videos in groups. Develop the skills of capturing, editing, and manipulating video.*	**Programming A – Selection in physical computing** *Use physical computing to explore the concept of selection in programming using the Crumble Controller.*	**Data and information – Flat-file databases** *Use tools within a database to order and answer questions about data. Create graphs and charts from their data to help solve problems. Use a real-life database to*	**Creating media – Vector drawing** *Use different drawing tools in Google Drawing to create vector drawings. Layer and group objects before duplication to support*	**Programming B – Selection in quizzes** *Use knowledge of writing programmes to design quiz with controlled outcomes using 'If...Then...Else' structure.*

				answer a question, and present work to others	*the creation of more complex pieces of work.*	
Y6	**Computing Systems and Networks – Internet communication** *Know how data is transferred over the internet. Recognise that the internet facilitates online communication and collaboration. Know what should and should not be shared on the internet.*	**Creating Media – 3D Webpage creation** *Introduce learners to the creation of websites for a chosen purpose. Identify what makes a good web page and use this information to design and evaluate their own website using Google Sites.*	**Programming A – Variables in games** *Explore the concept of variables in programming through games in Scratch. Use variables to create a simulation of a scoreboard.*	**Data Information – Introduction to spreadsheets** *Organising data into columns and rows to create their own data set. Apply formulas that include a range of cells and apply formulas to multiple cells by duplicating them. Use spreadsheets to plan an event and answer questions.*	**Creating Media B – 3D modelling** *Develop their knowledge and understanding of using a computer to produce 3D models. Create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy.*	**Programming B - Sensing** *Apply programming learning across KS2 to programme a physical device.*