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| **Digital Literacy:**  **Communicating, Collaborating and E-Safety, Multimedia**,  **Digital Imagery, Music and Sound** |
| **KS1:**Pupils are taught to:   * use technology safely and respectfully, keeping personal information private * identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies   **KS2:**Pupils are taught to:   * use technology safely, respectfully and responsibly * recognise acceptable/unacceptable behaviour * identify a range of ways to report concerns about content and contact. |
| **Communicating, Collaborating and E-Safety** *DL-CCE*  *Children learn how to communicate and share information in a variety of different ways.*  *They learn how to stay safe when using the Internet and how to keep personnel information private.*  *They talk about current issues such as Cyber bullying/friendship, mobile phone use and sensible and safe use of all Technology.*  *They also talk about being aware of how long they spend using this Technology and how they can take ownership of their usage. They discuss 'The right to be unavailable' and talk about turning off mobile phones and other devices.*  *We try to help them understand that social networking is a wonderful way to communicate but that it can be time consuming and demanding if not used carefully.* |
| **Multimedia** *DL-M*  *Children use Text and Graphics to create Multimedia presentations. They create posters, storybooks, slideshows, greeting cards and other projects often linked to the season or their class topic work. They are taught to recognise formatting tools and icons that they will help them feel confident in any desk top publishing or presentation software.* |
| ***Music and Sound*** *DL-MS*  *Children explore different music programs and Internet sites to create musical sounds, patterns and Tunes. They learn to record and insert sounds into a project to add atmosphere or effect.* |
| **Digital Imagery** *DL-DI*  *Children create pictures and animations using different programs and web sites inspired by different artists. They develop a knowledge and understanding of the tools and effects that they might find in art or graphic programs. They use digital cameras and web cams to take photos that can be edited. They learn to edit photos and create birds eye plans using object based graphic programs. They learn how to save their pictures, photos and films to be used in other documents or presentations.* |

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| **Information Technology** |
| **Data Handling, Research (using the Internet and Computer Software)** |
| **KS1**:Pupils are taught to   * use technology purposefully to create, organise, store, manipulate and retrieve digital content   **KS2**:Pupils are taught to:   * understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration * use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content * select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| **Data Handling** *IT-DH*  *Children explore different data handling programs and learn to create and use : Pictograms, charts and graphs. They use the computer to sort, search and display their data in different ways.  They talk about the wold around them, how data is stored and accessed and ways that they can use data handling in their own lives.* |
| **Research (using the Internet and Computer Software)** *IT-R*  *Children use both computer software and the Internet to research for a given Topic. They then present their findings in age appropriate ways using programs such as: Microsoft Word, Microsoft Power Point, Microsoft Publisher, clicker 5 and 2publishplus. They learn techniques to help them search more efficiently and how to be aware of copyright, false information and bias.* |

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| **Computer Science** |
| **Control & Monitoring, Floor and Screen Turtles, Programing , Modelling & Simulation** |
| **KS1:** Pupils are taught to:   * understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions * create and debug simple programs * use logical reasoning to predict the behaviour of simple programs * recognise common uses of information technology beyond school   **KS2:**Pupils are taught to :   * design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts * use sequence, selection, and repetition in programs; work with variables and various forms of input and output * use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs |
| **Control & Monitoring** *CS-CM*  *Children learn that Control Technology is all around us and they discuss examples that they have seen in their everyday lives. They learn about input and output devices both virtually and using models. They gain an understanding of control language and how to write an algorithm to control a devices such as Traffic Lights. They control lego models with simple sequences of instructions. They learn to understand the use of  monitoring equipment and sensors.* |
| **Floor and Screen Turtles** *CS-T*  *Children use Screen and Floor Turtles to explore simple Control Language. They experiment moving turtles in a variety of ways, predicting where the turtle will finish after a sequence of instructions. They develop knowledge of control language and use flow charts and written algorithms to guide their turtles to a destination. They learn to discuss problems and debug their algorithms. They use screen turtles to create complicated patterns.* |
| **Programing** *CS-P*  *Children use software to create simple interactive games. They share these games with peers and discuss how they can improve them. They then learn about coding and how to move a sprite in a program. They learn to create more complex games considering audience, content and level of difficulty. They are encouraged to explore different software recognising icons and familiar format.* |
| **Modelling & Simulation** *CS-MS*  *Children learn to talk about the differences between real and imaginary situations. They play a variety of simulation games and look for patterns and repetitions in these games. They learn how to evaluate different Simulation Programs, looking at graphic content and skills that can be learnt. They explore Spreadsheets and learn how to use a formula to help them to work within a budget. They talk about the use of Spreadsheets in everyday life and explore possibilities.* |