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| **Subject: ICT & Computing** | | | |
|  | **Autumn 1&2** | **Spring 1&2** | **Summer 1&2** |
| **Key Concepts & Skills** | **Unit Name:** Digital Literacy –Basic IT skills  Interactive Multimedia Presentation  **Unit Description:** Use of basic IT software;  Word processor Presentation  Email  Select appropriate software for a given task.  Present work professionally.  Name and save files in appropriate folder structure.  General being E-safe discussions – passwords, sharing information etc. | **Unit Name:** Computational thinking Website development  Digital Literacy – Online Communication & Computer Basics  **Unit Description:** Online communication  Respectful communication  Staying safe online  Know where to find help and advice on e-safety? HTML and CSS  How do webpages work  Searching the web  Knowledge of computer components.  Understand computers use binary.  Problem solving | **Unit Name:** Computing – Computational thinking & Visual/Block programming in Scratch  **Unit Description:** Understand sequence, selection and iteration.  Know what an algorithm is and ways they can be communicated.  Developing block code.  Debugging your code.  Problem solving.  Debugging. |
| **Key Questions** | 1. Do you know how to use Word processor, Presentation, Email software efficiently? 2. Can you choose an appropriate software for a given task? 3. Do you know how to professionally present your work? 4. How do you stay safe online? 5. Where can you find help and advice on e-safety? 6. Where can you report e-safety concerns? | 1. Can you identify the different parts of a computer system? 2. Can you discuss some historical facts about the history of electronic computers? 3. Can you discuss why computers only understand binary? 4. Can you convert denary numbers up to 15 into binary? 5. What is HTML? 6. How do you search the web? 7. Describe how you can communicate respectfully online? 8. What can you do if you are worried about something that has happened online? | 1. What is an algorithm? 2. Describe decomposition. 3. Can you create a flow chart for a given algorithm? 4. Why should you debug as you develop a program? 5. In a given system can you identify an input, process and output? Can you describe decomposition? 6. Can you define the terms; Input, process, output? 7. How does visual programming differ from textual programming? 8. In coding what is a variable? 9. Can you define the word algorithm?. 10. Can you independently develop and debug a program for a given problem? 11. Can you devise your own program?? |
| **Key Words** | * Algorithm * Decomposition * Selection * Iteration * Sequence * Flowcharts * Digital footprint * Etiquette * Folder structure * Header/Footer Image * Hyperlink | * Hyper Text Markup Language * Algorithm * Decomposition * Selection * Iteration * Sequence * Variable * Binary * Bit * Denary * Hardware * Software * Peripheral | * Algorithm * Decomposition * Abstraction * Flow chart * Debug * Input * Process * Output * Text based programming * Variable * Iteration * Selection |