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| Computing & Coding  |
| **Programme of Study**  | * design and write 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;
* generate **appropriate** inputs and predicted outputs to test programs
* use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
 |
| **Skills & Concepts** | 1. Can they extend understanding and knowledge of programming by experiencing a variety of resources?
2. Can they begin to correct errors (debug) as they program devices and actions on screen?
3. Can they develop computational thinking by undertaking a variety of specific tasks?
4. Can they use assisted programming software (Scratch) to plan, design and create characters and scenes, which interact with external controllers (e.g. keyboard and/or mouse)?
 |
| **Key Words**  | **ALGORITHM CONTROL INSTRUCTIONS RUN** **REPEAT SELECTION SEQUENCE DE-BUG****VARIABLES PROGRAM DECOMPOSITION****LOOP EXECUTE COMPUTATIONAL THINKING FOREVER**  |

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| Digital Creation  |
| **Programme of Study**  | 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, design and create systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| **Skills & Concepts** | 1. Can they recognise the features of good page design and multimedia presentations and consider how these meet the needs of the audience e.g. poster, newspaper, menu, instructions?
2. Can they understand that images, sounds and text on a website can be subject to copyright and abide by copyright rules when creating a presentation?
3. Can they understand how sound can be used in presentations to create meaning and provide effects?
4. Can they add simple titles, credits and special effects e.g. transitions?
5. Can they understand that planning evaluating and improving and editing are vital parts of the design process and that ICT allows changes to be made quickly and efficiently?
6. Can they use various tools in photo-manipulation software to edit/change an image e.g. applying different special effects?
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| **Key Words**  | **Audience Edit Images****Purpose Layout Modify Sound****Media Font Enhance Graphics**  |

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| E-Safety & E- Responsibility  |
| **Programme of Study**  | use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **Skills & Concepts** | 1. Do I know what cyberbullying is and how to address it?
2. Do I understand how websites use advertisements to promote products?
3. Can I create strong passwords and understand privacy settings?
4. Can I safely send and receive emails?
5. Can I explore different ways children can communicate online?
6. Can I use my knowledge about online safety to plan a party online?
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| **Key Works**  | **ESAFE****RESPONSIBILITY** **FILTERING****SECURE****PASSWORD****PROTECTION****CYBER-BULLYING**  |

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| Working with Data  |
| **Programme of Study**  | 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, design and create systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| **Skills & Concepts**  | 1. Can they change the contents of cells in a pre-prepared spreadsheet and explore the consequences?
2. Do they understand how spreadsheet models allow changes to be made quickly and easily in comparison with real life situations?
3. Can they generate and compare different charts and graphs (using graphing software, or spreadsheets) and understand that different graphs are used for different purposes?
4. Can they use a pre-prepared spreadsheet to record data to answer questions, explore simple number patterns and produce graphs?
 |
| **Key Words**  | **DATA FILTER FIELD****INFORMATION GRAPH RELIABILITY****CELL INTERPRET ACCURACY****ANALYSIS COMPARE** **DATABASE RELATIONSHIP****RECORD ACCCURACY** |

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| Networks Communication and Collaboration  |
| **Programme of Study**  | 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  |
| **Skills & Concepts** | 1. Can they use online tools such as blogs and forums to exchange information and collaborate with others within and beyond their school?
2. Can they recognise the advantages and consequences of online communication?
3. Can they record and share information electronically?
 |
| **Key Words**  | Email Blogging Collaboration Contribution Forums Wikis PublishAudienceCommunicationFeedback |

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| Finding & Using Information  |
| **Programme of Study**  | use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital contentunderstand computer networks including the internet; |
| **Skills & Concepts** | 1. Can they select key words to include in web searches?
2. Can they search for relevant images on the Internet to import into a document?
3. Can they use Internet research to help create a report or presentation that answers specific questions on a topic?
4. Can they copy and paste images from the Internet into a document to illustrate it?
 |
| **Key Words**  | ResearchContentInformationSearch engineResultsRankingUnique Resource Locator (url)Validity |