**Skills Key: Computer Science – Programming, Computer Science – Theory, Information Technology, Digital Literacy.**

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| **Year/ Term** | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Year 1** | Grouping data Exploring object labels, then using them to sort and group objects by properties | Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes | Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally | Programming animations Designing and programming the movement of a character on screen to tell stories | Digital writing Using a computer to create and format text, before comparing to writing non-digitally | Technology around us Recognising technology in school and using it responsibly |

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| **Year/ Term** | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Year 2** | Digital photography Capturing and changing digital photographs for different purposes. | Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions. | Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer. | Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz | Information technology around us Identifying IT and how its responsible use improves our world in school and beyond. | Digital music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. |

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| **Year 3** | Desktop publishing Creating documents by modifying text, images, and page layouts for a specified purpose | Sequencing sounds Creating sequences in a block-based programming language to make music. | Branching databases Building and using branching databases to group objects using yes/no questions | Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions. | Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks | Stop-frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story. |

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| **Year 4** | Photo editing Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. | Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes | Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation. | Repetition in games Using a block-based programming language to explore count-controlled and infinite loops when creating a game | The internet Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. | Audio production Capturing and editing audio to produce a podcast, ensuring that copyright is considered. |

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| **Year/ Term** | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Year 5** | Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects | Selection in physical computing Exploring conditions and selection using a programmable microcontroller. | Flat-file databases Using a database to order data and create charts to answer questions | Selection in quizzes Exploring selection in programming to design and code an interactive quiz. | Systems and searching Recognising IT systems in the world and how some can enable searching on the internet. | Video production Planning, capturing, and editing video to produce a short film. |

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| **Year/ Term** | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Year 6** | Webpage creation Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. | Variables in games Exploring variables when designing and coding a game. | Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data. | Sensing movement Designing and coding a project that captures inputs from a physical device. | Communication and collaboration Exploring how data is transferred by working collaboratively online. | 3D modelling Planning, developing, and evaluating 3D computer models of physical objects. |