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|  | **Computing systems and networks** | **Creating media** | **Programming A** | **Data and information** | **Creating media** | **Programming B** |
| **Year 1** | Technology around us | Digital painting | Moving a robot | Grouping data | Digital writing | Programming animations |
| **Year2** | Information technology around us | Digital photography | Robot algorithms | Pictograms | Making music | Programming quizzes |
| **Year 3** | Connecting computers | Stop-frame animation | Sequencing sounds | Branching databases | Desktop publishing | Events and actions in programs |
| **Year 4** | The internet | Audio production | Repetition in shapes | Data logging | Photo editing | Repetition in games |
| **Year 5** | Sharing information | Video production | Selection in physical computing | Flat-file databases | Vector drawing | Selection in quizzes |
| **Year 6** | Internet communication | Webpage creation | Variables in games | Introduction to spreadsheets | 3D modelling | Sensing |

Curriculum overview

Progression of skills

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|  | **Computing systems and networks** | **Creating media** | **Programming A** | **Data and information** | **Creating media** | **Programming B** |
| **Year 1** | **Technology around us**  Recognising technology in school and using it responsibly. | **Digital painting**  Choosing appropriate tools in a program to create art and making comparisons with working non-digitally. | **Moving a robot**  Writing short algorithms and programs for floor robots and predicting program outcomes. | **Grouping data**  Exploring object labels, then using them to sort and group objects by properties. | **Digital writing**  Using a computer to create and format text, before comparing to writing non-digitally. | **Programming animations**  Designing and programming the movement of a character on screen to tell stories. |
| **Year 2** | **Information technology around us**  Identifying IT and how its responsible use improves our world in school and beyond. | **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. | **Making music**  Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. | **Programming quizzes**  Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. |
| **Year 3** | **Connecting computers**  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. | **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. | **Desktop publishing**  Creating documents by modifying text, images, and page layouts for a specified purpose. | **Events and actions in programs**  Writing algorithms and programs that use a range of events to trigger sequences of actions. |
| **Year 4** | **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. | **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. | **Photo editing**  Manipulating digital images and reflecting on the impact of changes and whether the required purpose is fulfilled. | **Repetition in games**  Using a block-based programming language to explore count-controlled and infinite loops when creating a game. |
| **Year 5** | **Sharing information**  Recognising IT systems around us and how they allow us to search the internet. | **Video production**  Planning, capturing, and editing video to produce a short film. | **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. | **Vector drawing**  Creating images in a drawing program by using layers and groups of objects. | **Selection in quizzes**  Exploring selection in programming to design and code an interactive quiz. |
| **Year 6** | **Internet communication**  Identifying and exploring how data is transferred and information is shared online. | **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. | **3D modelling**  Planning, developing, and evaluating 3D computer models of physical objects. | **Sensing**  Designing and coding a project that captures inputs from a physical device. |