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| ILSNGTON CE PRIMARY SCHOOL Computing Long-Term Rolling Programme | | | | | | |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
|  | **Computing systems and networks** | **Creating media** | **Creating Media** | **Data and information** | **Programming A** | **Programming B** |
| Year 1/2  From September 2022 | **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. | **Making music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. | **Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer. | **Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions. | **An introduction to quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. |
| Year 1/2  From September 2021 | **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. | **Digital writing** Using a computer to create and format text, before comparing to writing non-digitally. | **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. | **Introduction to animation** Designing and programming the movement of a character on screen to tell stories. |
| Year 3/4  From September 2022 | **The internet** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. | **Audio editing** Capturing and editing audio to produce a podcast, ensuring that copyright is considered. | **Photo editing** Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. | **Data logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation. | **Repetition in shapes** Using a text-based programming language to explore count-controlled loops when drawing shapes. | **Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game. |
| Year 3/4  From September 2021 | **Connecting computers**  Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks. | **Animation** Capturing and editing digital still images to produce a stop-frame animation that tells a story. | **Desktop publishing** Creating documents by modifying text, images, and page layouts for a specified purpose. | **Branching databases** Building and using branching databases to group objects using yes/no questions. | **Sequence in music** Creating sequences in a block-based programming language to make music. | **Events and actions** Writing algorithms and programs that use a range of events to trigger sequences of actions. |
| Year 5/6  From September 2022 | **Communication** Identifying and exploring how data is transferred and information is shared online. | **3D Modelling** Planning, developing, and evaluating 3D computer models of physical objects. | **Web page creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. | **Spreadsheets** Answering questions by using spreadsheets to organise and calculate data. | **Variables in games** Exploring variables when designing and coding a game. | **Sensing** Designing and coding a project that captures inputs from a physical device. |
| Year 5/6  From September 2021 | **Sharing information** Recognising IT systems around us and how they allow us to search the internet. | **Vector drawing** Creating images in a drawing program by using layers and groups of objects. | **Video editing** Planning, capturing, and editing video to produce a short film. | **Flat-file databases** Using a database to order data and create charts to answer questions. | **Selection in physical computing** Exploring conditions and selection using a programmable microcontroller. | **Selection in quizzes** Exploring selection in programming to design and code an interactive quiz. |