| Ellingham C of E Primary School Computing Curriculum Progression Map | | | | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|--|
| | Computing Systems and Networks | Creating Media A | Programming A | Data and Information | Creating Media B | Programming B | | | | |
| EYFS | Using technology safely. Beginning to recognise some ways we can use the internet to communicate safely. | Using iPads to take photographs. Making short audio presentations, such as on e- safety. | Making an environment for a remote- controlled toy to manoeuvre around. Controlling simple floor robots. | Using digital timers and thermometers to record data. | Creating simple presentations about our families, using text and pictures. Creating and performing digital music. | Exploring simple music algorithms using apps. | | | | |
| Year 1 | Recognising technology in school and using it responsibly. | Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally. | Writing short algorithms and programs for floor robots, and predicting program outcomes. | Exploring object labels, then using them to sort and group objects by properties. | Using a computer to create and format text, before comparing to writing non-digitally. | Designing and programming the movement of a character on screen to tell stories. | | | | |
| Year 2 | Identifying IT and how its responsible use improves our world in school and beyond. | Capturing and changing digital photographs for different purposes. | Creating and debugging programs, and using logical reasoning to make predictions. | Collecting data in tally charts and using attributes to organise and present data in a pictogram on a computer. | Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. | Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. | | | | |
| Year 3 | Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks. | Capturing and editing digital still images to produce a stop-frame animation that tells a story. | Creating sequences in a block- based programming language to make music. | Building and using branching databases to group objects using yes/no questions. | Creating documents by modifying text, images, and page layouts for a specified purpose. | Writing algorithms and programs that use a range of events to trigger sequences of actions. | | | | |

| Year 4 | Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. | Capturing and editing audio to produce a podcast, ensuring that copyright is considered. | Using a text- based programming language to explore count- controlled loops when drawing shapes. | Recognising how and why data is collected over time, before using data loggers to carry out an investigation. | Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. | Using a block- based programming language to explore count- controlled and infinite loops when creating a game. |
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| Year 5 | Identifying and exploring how information is shared between digital systems. | Planning, capturing, and editing video to produce a short film. | Exploring conditions and selection using a programmable micro- controller. | Using a database to order data and create charts to answer questions. | Creating images in a drawing program by using layers and groups of objects. | Exploring selection in programming to design and code an interactive quiz. |
| Year 6 | Recognising how the WWW can be used to communicate and be searched to find information. | Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. | Exploring variables when designing and coding a game. | Answering questions by using spreadsheets to organise and calculate data. | Planning, developing, and evaluating 3D computer models of physical objects. | Designing and coding a project that captures inputs from a physical device. |

*'A' concepts, skills and knowledge are routinely taught prior to 'B', so repetition and consolidation is builtin. The progression is taught over two years due to mixed-age classes.