**YEAR 5 COMPUTING - CURRICULUM OVERVIEW 2024 – 2025**

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| **YR5** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **YEAR 5 Content** | **Computing systems and networks – sharing information**Systems and searching Recognising IT systems around us and how they allow us to search the internet. | **Creating media – Video production**Planning, capturing, and editing video to produce a short film. | **Creating media – Vector drawing**Creating images in a drawing program by using layers and groups of objects. | **Data and information – Flat-file databases**Using a database to order data and create charts to answer questions. | **Programming A –****Selection in physical computing**Exploring conditions and selection using a programmable microcontroller. | **Programming B – Selection in quizzes**Exploring selection in programming to design and code an interactive quiz. |
| **Key new knowledge** | **Sharing Information*** Develop understanding of computer systems and how information is transferred between systems and devices.
* Consider small-scale systems as well as large-scale systems.
* Explain the input, output, and process aspects of a variety of different real-world systems.
* Discover how information is found on the World Wide Web, through learning how various search engines work.
 | **Video Production*** Learn how to create short videos by working in pairs or groups.
* Develop the skills of capturing, editing, and manipulating video.
* Design, create and edit a video.
 | **Vector Drawing*** Investigate and begin creating vector drawings.
* Understand how to use different drawing tools to help create images.
* Recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object.
* Begin to layer objects and begin grouping and duplicating to support the creation of more complex pieces of work.
 | **Flat-file Databases*** Explore how a flat-file database can be used to organise data in records.
* Use tools within a database to order and answer questions about data.
* Create graphs and charts from their data to help solve problems.
* Use a real-life database to answer a question, and present work to others.
 | **Programming – Selection in Phyiscal Computing*** Discover how to control a simple circuit connected to a computer.
* Write a program that includes count-controlled loops.
* Be able to explain that a loop can stop when a condition is met or continue to check until it is met.
* Design a physical project that includes selection.
* Design a program that controls a physical environment.
 | **Programming – Selection in quizzes*** Be able to explain how selection is used in computer programming.
* Understand conditional statements lead to a conditional answer.
* Be able to explain that selection directs the flow of a program.
* Design a quiz program that uses selection.
* Evaluate quiz program.
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| **Assessments** | Formative questioning and teacher observation.Summative end of unit assessment. | Formative questioning and teacher observation.End of unit assessment rubric in planning. | Formative questioning and teacher observation.End of unit assessment rubric in planning. | Formative questioning and teacher observation.End of unit assessment rubric in planning. | Summative end of unit assessment. | Summative question and answer sheet at end of unit. |