**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. |
| **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. |