**YEAR 6 COMPUTING - CURRICULUM OVERVIEW 2024 – 2025**

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| **YR6** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **YEAR 6 Content** | **Computing systems and networks – Communication and collaboration**  Identifying and exploring how data is transferred and shared online. | **Creating media – Webpage creation**  Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. | **Creating media – 3D modelling**  Planning, developing, and evaluating 3D computer models of physical objects. | **Data and information – Introduction to spreadsheets**  Answering questions by using spreadsheets to organise and calculate data. | **Programming A – Variables in games**  Exploring variables when designing and coding a game. | **Programming B – Sensing**  Designing and coding a project that captures inputs from a physical device. |
| **Key new knowledge** | **Internet Communication**   * Explore how data is transferred over the internet. * Investigate the makeup and structure of data packets. * Explore how the internet facilitates online communication and collaboration. * Discover how to communicate responsibly by considering what should and should not be shared on the internet. | **Web Page Creation**   * Explore how to create websites for a chosen purpose. * Identify what makes a good web page and use this information to design and evaluate a website using Google Sites. * Investigate and discuss copyright and fair use of media, the aesthetics of sites, and navigation paths. | **3D Modelling**   * Develop knowledge and understanding of using a computer to produce 3D models. * Investigate working in a 3D space, moving, resizing, and duplicating objects. * Create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy. * Examine the benefits of grouping and ungrouping 3D objects, then go on to plan, develop, and evaluate a 3D model of a building. | **Introduction to Spreadsheets**   * With support, organise date into columns and rows to create a data set. * Investigate the importance of formatting data to support calculations. * Apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. * Use spreadsheets to plan an event and answer questions. * Create charts, and evaluate results in comparison to questions asked. | **Programming – Variables in games**   * Define a ‘variable’ as something that is changeable. * Explain why a variable is used in a program. * Choose how to improve a game by using variables. * Design a project that builds on a given example * use my design to create a project. * Evaluate a project. | **Programming – repetition in shapes**   * Create a program to run on a controllable device. * Be able to explain that selection can control the flow of a program. * Update a variable with a user input. * Use an conditional statement to compare a variable to a value. * Design a project that uses inputs and outputs on a controllable device. * Develop a program to use inputs and outputs on a controllable device. |
| **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 end of unit assessment. |