**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.
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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 end of unit assessment. |