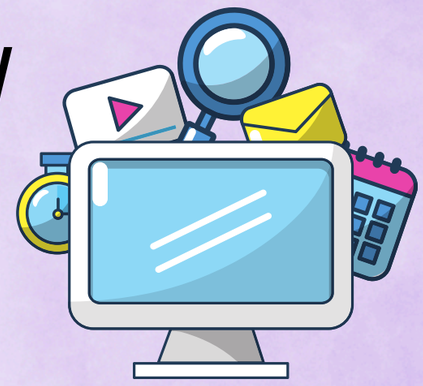
Computing Curriculum Overview

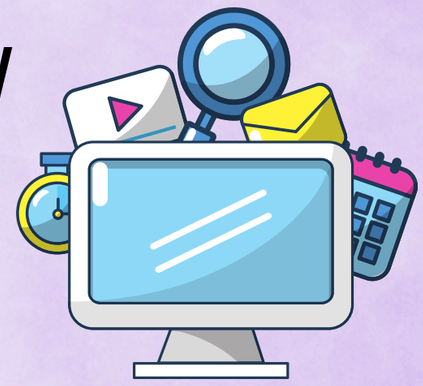
Year 5 and 6 - Year A



Autumn 1	Autumn 2
Concept Maps	**Coding**
To understand the need for visual representation when generating and discussing complex ideas. To understand the uses of a 'concept map'. To understand and use the correct vocabulary when creating a concept map. To create a concept map. To understand how a concept map can be used to retell stories and information. To create a collaborative concept map and present this to an audience	To begin to simplify code. To create a playable game. To understand what a simulation is. To program a simulation using 2Code. To know what decomposition and abstraction are in computer science. To a take a real-life situation, decompose it and think about the level of abstraction. To understand how to use friction in code. To begin to understand what a function is and how functions work in code. To understand what the different variables types are and how they are used differently. To understand how to create a string. To understand what concatenation is and how it works
Spring 1	**Spring 2**
Spreadsheets	**Databases**
To use formulae within a spreadsheet to convert measurements of length and distance. To use a spreadsheet to model a real life problem. To use spreadsheet tools to investigate probability. To use the count tool to answer hypotheses about common letters in use.	To understand what a database is. To design and create a database. To build queries to find information. To solve problems using a database.
Summer 1	**Summer 2**
Game creator	**3D Modelling**
To plan a game. To design and create the game environment. To design and create the game quest. To finish and share the game. To self and peer evaluate.	To be introduced to 2Design and Make and the skills of computer aided design. To explore the effect of moving points when designing. To design a 3D Model to fit certain criteria. To refine and print a model.

Computing Curriculum Overview

Year 5 and 6 - Year B



Autumn 1	Autumn 2
Blogging	**Coding**
To identify the purpose of writing a blog. To identify the features of a successful blog. To plan the theme and content for a blog. To understand how to write a blog and a blog post. To consider the effect upon the audience of changing the visual properties of the blog. To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher. To understand the importance of commenting on blogs.	To design a playable game with a timer and a score. To plan and use selection and variables. To understand how the launch command works. To use functions and understand why they are useful. To understand how functions are created and called. To use flowcharts to create and debug code. To create a simulation of a room in which devices can be controlled. To understand how user input can be used in a program. To understand how 2Code can be used to make a text-adventure game.
Spring 1	**Spring 2**
Spreadsheets	**Quizzing**
To know what a spreadsheet looks like. To navigate and enter data into cells. To introduce some basic data formulae for percentages, averages and max and min numbers. To demonstrate how the use of spreadsheets can save time and effort when performing calculations. To use a spreadsheet to model a situation. To demonstrate how a spreadsheet can make complex data clear by manipulating the way it is presented. To create a variety of graphs in sheets. To apply spreadsheet skills to solving problems.	To create a picture-based quiz for young children. To learn how to use the question types within 2Quiz. To explore the grammar quizzes. To make a quiz that requires the player to search a database. To make a survey and analyse the responses.
Summer 1	**Summer 2**
Blogging	**Networks** / **Text Adventures**
To identify the purpose of writing a blog. To identify the features of a successful blog. To plan the theme and content for a blog. To understand how to write a blog and a blog post. To consider the effect upon the audience of changing the visual properties of the blog. To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher. To understand the importance of commenting on blogs.	To learn about what the Internet consists of. To find out what a LAN and a WAN are. To find out how the Internet is accessed in school. To research and find out about the age of the Internet. To think about what the future might hold. To find out what a text adventure is. To use 2Connect to plan a story adventure. To make a story-based adventure using 2Create a Story. To read and understand given code for a text adventure game. To debug and improve a text adventure game.