Curriculum Map

Y6 - Woodpeckers Class

	At the end of each unit, children will be able to:					
	Lesson 1	**Lesson 2**	**Lesson 3**	**Lesson 4**	**Lesson 5**	**Lesson 6**
Computing Systems - Communication and Collaboration	**Explain the importance of internet addresses** • recognise that data is transferred using agreed methods • explain that internet devices have addresses • describe how computers use addresses to access websites	**Recognise how data is transferred across the internet** • identify and explain the main parts of a data packet • explain that data is transferred over networks in packets • explain that all data transferred over the internet is in packets	**Explain how sharing information online can help people to work together** • recognise how to access shared files stored online • send information over the internet in different ways • explain that the internet allows different media to be shared	**Evaluate different ways of working together online** • identify different ways of working together online • recognise that working together on the internet can be public or private • explain how the internet enables effective collaboration	**Recognise how we communicate using technology** • explain the different ways in which people communicate • identify that there are a variety of ways to communicate over the internet • choose methods of communication to suit particular purposes	**Evaluate different methods of online communication** • compare different methods of communicating on the internet • decide when I should and should not share information online • explain that communication on the internet may not be private
Creating Media - Web Page Creation	**Review an existing website and consider its structure** • explore a website • discuss the different types of media used on websites •I know that websites are written in HTML	**Plan the features of a web page** • recognise the common features of a web page • suggest media to include on my page • draw a web page layout that suits my purpose	**Consider the ownership and use of images (copyright)** • say why I should use copyright-free images • find copyright-free images • describe what is meant by the term	**Recognise the need to preview pages** • add content to my own web page • preview what my web page looks like • evaluate what my web page looks like on different devices and suggest/make edits.	**Outline the need for a navigation path** • explain what a navigation path is • describe why navigation paths are useful • make multiple web pages and link them using hyperlinks	**Recognise the implications of linking to content owned by other people** • explain the implication of linking to content owned by others • create hyperlinks to link to other people's work • evaluate the user experience of a website

Programming A - Variables in Games	**Define a 'variable' as something that is changeable** • identify examples of information that is variable • explain that the way a variable changes can be defined • identify that variables can hold numbers or letters	**Explain why a variable is used in a program** • identify a program variable as a placeholder in memory for a single value • explain that a variable has a name and a value • recognise that the value of a variable can be changed	**Choose how to improve a game by using variables** • decide where in a program to change a variable • make use of an event in a program to set a variable • recognise that the value of a variable can be used by a program	**Design a project that builds on a given example** • choose the artwork for my project • create algorithms for my project • explain my design choices	**Use my design to create a project** • create the artwork for my project • choose a name that identifies the role of a variable • test the code that I have written	**Evaluate my project** • identify ways that my game could be improved • use variables to extend my game • share my game with others
Data and Information - Spreadsheets	**Create a data set in a spreadsheet** • collect data • suggest how to structure my data • enter data into a spreadsheet	**Build a data set in a spreadsheet** • explain what an item of data is • choose an appropriate format for a cell • apply an appropriate format to a cell	**Explain that formulas can be used to produce calculated data** • explain which data types can be used in calculations • construct a formula in a spreadsheet • identify that changing inputs changes outputs	**Apply formulas to data** • calculate data using different operations • create a formula which includes a range of cells • apply a formula to multiple cells by duplicating it	**Create a spreadsheet to plan an event** • use a spreadsheet to answer questions • explain why data should be organised • apply a formula to calculate the data I need to answer questions	**Choose suitable ways to present data** • produce a chart • use a chart to show the answer to a question • suggest when to use a table or chart
Creating Media - 3D Modelling	**Recognise that you can work in three dimensions on a computer** • add 3D shapes to a project • view 3D shapes from different perspectives • move 3D shapes relative to one another	**Identify that digital 3D objects can be modified** • resize an object in three dimensions • lift/lower 3D objects • recolour a 3D object	**Recognise that objects can be combined in a 3D model** • rotate objects in three dimensions • duplicate 3D objects • group 3D objects	**Create a 3D model for a given purpose** • accurately size 3D objects • show that placeholders can create holes in 3D objects • combine a number of 3D objects	**Plan my own 3D model** • analyse a 3D model • choose objects to use in a 3D model • combine objects in a design	**Create my own digital 3D model** • construct a 3D model based on a design • explain how my 3D model could be improved • modify my 3D model to improve it

Programming B - Sensing Movement	**Create a program to run on a controllable device** • apply my knowledge of programming to a new environment • test my program on an emulator • transfer my program to a controllable device	**Explain that selection can control the flow of a program** • identify examples of conditions in the real world • use a variable in an if, then, else statement to select the flow of a program • determine the flow of a program using selection	**Update a variable with a user input** • use a condition to change a variable • experiment with different physical inputs • explain that checking a variable doesn't change its value	**Use an conditional statement to compare a variable to a value** • use an operand (e.g. <>=) in an if, then statement • explain the importance of the order of conditions in else, if statements • modify a program to achieve a different outcome	**Design a project that uses inputs and outputs on a controllable device** • decide what variables to include in a project • design the algorithm for my project • design the program flow for my project	**Develop a program to use inputs and outputs on a controllable device** • create a program based on my design • test my program against my design • use a range of approaches to find and fix bugs
E-safety	List some assertive behaviours; Recognise peer influence and pressure; Demonstrate using some assertive behaviours, through role-play, to resist peer influence and pressure. Be familiar with the CEOP button and the Think U Know resources		Accept that responsible and respectful behaviour is necessary when interacting with others online and face-to-face; Understand and describe the ease with which something posted online can spread. Know that it is illegal to create and share sexual images of children under 18 years old; Explore the risks of sharing photos and films of themselves with other people directly or online; Know how to keep their information private online.		Develop and embed internet safety skills using Be an Internet Legend resources - reinforce skills around responding to inappropriate content or cyberbullying, phishing, grooming. Understand how to use settings and parental controls to keep ourselves safe on different sites.	
Vocab	**Unit 1 -** Collaboration Data packets Public / private	**Unit 2 -** HTML Copyright Navigation Path Hyperlink	**Unit 3 -** Variable	**Unit 4 -** Spreadsheet Formula Multiple cells	**Unit 5 -** Three dimensions Modification Perspective	**Unit 6 -** Variable Physical Input Emulator Controllable device Operand