Curriculum Map: **Computing**   **Year 6**

Below outlines the learning focus for each term

	Theme: To create responsible digital citizens who make smart choices online			
Term	**Learning Focus**		**Conceptual Development**	
	Knowledge	**Skills**		
Autumn 1	**Computer Science** To understand what variables can be used beyond programming timers and game scores To understand that variables can be used to create logical statements that are either true or false (Boolean expressions)	To use variables to ask the user for an input To use variables to affect the difficulty of a game To combine variables with conditional events To use variables to perform calculations To use Boolean expressions To debug code	**Build upon:** To create game simulations that use random numbers to control speed and direction **Prepare for:** To program games where objects match the speed and direction of the mouse	
Autumn 2	**Information Technology** To understand that MS Excel can be used to store, organise and calculate data	To enter data and formulas into a spreadsheet To present data based on calculations by inserting a graph To use formulas to calculate totals and averages To sort data by different criteria To create a formula to solve a specific problem (using figures and cell references) To replicate formulas over several cells To plan and calculate a spending budget	**Build upon:** To create a spreadsheet that stores and presents data about a sports competition **Prepare for:** To achieve challenging goals that involve collecting and analysing data	
Spring	**Computer Science** To understand how code can detect property values and parameters of objects	To use random numbers, variables and conditional events to affect an object's properties To detect properties of objects and apply these to other objects To detect the speed and direction of the mouse and pass these onto objects	**Build upon:** To use variables in more complex ways to program simulations **Prepare for:** To design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems	
Summer	**Information Technology** To understand what a documentary is	To plan additional elements for film-making such as locations and props To evaluate whether information is reliable or not To speak clearly into the camera when being recorded To frame an appropriate filming shot when interviewing To arrange video files to form a complete film using film editing software	**Build upon:** To create a school radio podcast **Prepare for:** To undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices	

| Online Safety Lessons (1 per half term) | **Digital Literacy**
To know what cyberbullying is
To know what a website is
To understand the benefits and pitfalls of online relationships
To apply my online safety knowledge to my online activities
To know what phishing means | To identify good strategies to deal with bullying
To identify secure websites by identifying privacy seals of approval
To identify information that I should never share online
To choose appropriate actions to stay safe online
To identify different types of online scams, including phishing | **Build upon:**

To understand the potential dangers of spam email

Prepare for:
To understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy |