Year 7 – COMPUTER SCIENCE Programme of Study

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit/Topic	**Introduction** **All About Me**	**eSafety**	**Coding in C# Part 1: First steps.**	**Coding in C# Part 2: Lazy nursery rhymes.**	**Computing Unit Part 1: Plugged**	**Coding in C# Part 3: Turtle Graphics**
Enquiry Question	How can I use ICT safely in school? How can I effectively use Google Drive, Docs and Classroom?	How can I use online services safely? What are the risks and how can I protect myself? What should I know about social media?	How do I start coding in C#?	Thinking smarter not harder: making the computer do the repetitive tasks.	What makes a computer?	How can we make the computer draw?
Key Content	• Logging into Windows • Google Accounts • Password choices and security • The other systems: Satchel, G4S • Introduction to Google • Docs • Sharing and collaborating • Formatting documents • Adding tables, lists, links and images	• Investigation of key eSafety measures • Searching effectively • Collaborative planning: • Working well together • Creating Google Sites • Understanding site navigation and hierarchy • Adding pages, content holders, text, images, links • Selecting and adding appropriate content to build a detailed eSafety website covering a wide range of elements	• Five basic data types. • Reading and writing text to the console. • Importance of syntax and grammar. • Using variables. • Using for loops (iteration). • Using if/else (selection).	• Programs as implementations of algorithms. • Computational thinking. • Iteration with variation. • Identifying patterns.	• Hardware as a system, components, inputs and outputs. • Hardware requires software to be of use. • Common components in a traditional PC. • Inputs and outputs beyond typical computers: cars, supermarket checkouts, the home.	• Using the C# Turtle library. • Understanding co-ordinates, pixels, magnitude. • Using colour. • Using iteration. • Using modulo to yield colour patterns. • Using functions to create shapes on demand to a given specification. • Using maths expressions to create complex patterns.
Milestone Assessment	N/A	The website will detail important points about eSafety which early or non-Internet users should be aware of.	N/A	A journal that details code, explanations and finished product for a range of increasingly complex nursery rhymes. (SWEDE mnemonic is used as the structure to evidence understanding.)	N/A	A SWEDE journal that documents first steps and basic shapes (squares, hexagons) through to complex computer art, with explanations of what the code is doing.