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	Computing Hero	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?	Who are the key female computing pioneers?	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	• Searching effectively • Review of key pioneers • Collaborative planning: working well together • Creating Google Sites • Understanding site navigation and hierarchy • Adding pages, content holders, text, images, links	• 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 shared website which will detail the groups' choice of hero, biography, achievements, products/services (as a gallery) and legacy.	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.