Term	NC Topics	RSE Assessment
AUTUMN	**Unit title – Data and Data Protection** ➢ Understand the difference between data and information ➢ Key features and functions of spreadsheets including SUM, MIN, MAX, AVERAGE, COUNTIF ➢ Formatting spreadsheets ➢ Explore methods to protect personal data ➢ Understand the laws concerning data and data security **NC Links:** **3.1—**design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems 3.9—understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns	End of unit online assessment – teacher assessed MCQs Spreadsheet skills- peer and teacher assessed
SPRING	**Unit title – Networks** ➢ Define a network ➢ Explore the benefits of networking ➢ Understand how data is transmitted across networks using protocols ➢ Understand the difference between wired and wireless transmission ➢ Define the 'internet' and the 'world wide web' ➢ Investigate internet protocols **NC Links:** 3.5—understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	End of unit online assessment – teacher assessed MCQs
SUMMER	**Unit title – Programming 2: Scratch**	

	➢ Introduction to block-based coding ➢ Create solutions to given problems using Scratch ➢ Be able to define variables ➢ Design systems using variables, count-based iteration and sub-routines ➢ Understanding the importance of testing in the system life cycle ➢ Be able to independently de-bug systems ➢ Evaluate final solution to find areas for further improvement **NC Links:** 3.2—understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem 3.3—use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions	End of unit online assessment – teacher assessed MCQs Final Scratch solution – self and teacher assessed