Computing Year 6	Autumn	Spring	Summer
Scientific Enquiry Objectives ● Pupils should be taught to: ● design, write and debug programs that accomplish specific goals, including controlling ● or simulating physical systems; solve problems by decomposing them into smaller ● parts ● use sequence, selection, and repetition in programs; work with variables and various ● forms of input and output ● use logical reasoning to explain how some simple algorithms work and to detect and ● correct errors in algorithms and programs ● understand computer networks including the internet; how they can provide multiple ● services, such as the world wide web; and the opportunities they offer for ● communication and collaboration	**Spreadsheets (6.3)** To use a spreadsheet to investigate the probability of the results of throwing many dice. • To use a spreadsheet to calculate the discount and final prices in a sale. • To use a spreadsheet to plan how to spend pocket money and the effect of saving money. • To use a spreadsheet to plan a school charity day to maximise the money donated to charity. **Online Safety 6.2** To identify benefits and risks of mobile devices broadcasting the location of the user/device. • To identify secure sites by looking for privacy seals of approval. • To identify the benefits and risks of giving personal information. • To review the meaning of a digital footprint. • To have a clear idea of appropriate online behaviour. • To begin to understand how information online can persist. • To understand the importance of balancing game and screen time with other parts of their lives.	**Coding (6.1)** To design a playable game with a timer and a score. • To plan and use selection and variables. • To understand how the launch command works. • To use functions and understand why they are useful. • To understand how functions are created and called. • To use flowcharts to create and debug code. • To create a simulation of a room in which devices can be controlled. • To understand how user input can be used in a program. • To understand how 2Code can be used to make a text-adventure game.	**Networks (6.5)** To learn about what the Internet consists of. • To find out what a LAN and a WAN are. • To find out how the Internet is accessed in school. • To research and find out about the age of the Internet. • To think about what the future might hold for networking. **Binary (6.8)** To examine how whole numbers are used as the basis for representing all types of data in digital systems. • To recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems). • To understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.

- use search technologies effectively, appreciate how results are selected and ranked, - and be discerning in evaluating digital content - select, use and combine a variety of software (including internet services) on a range of - digital devices to design and create a range of programs, systems and content that - accomplish given goals, including collecting, analysing, evaluating and presenting data - and information - use technology safely, respectfully and responsibly; recognise - acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	• To identify the positive and negative influences of technology on health and the environment.		