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| **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
* 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. | Cycle A |
| **Spreadsheets (6.3)**To use a spreadsheet to investigate theprobability of the results of throwingmany dice.• To use a spreadsheet to calculate thediscount and final prices in a sale.• To use a spreadsheet to plan how tospend pocket money and the effect ofsaving money.• To use a spreadsheet to plan a schoolcharity day to maximise the moneydonated 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 ofgiving personal information.• To review the meaning of a digitalfootprint.• To have a clear idea of appropriateonline behaviour.• To begin to understand howinformation online can persist.• To understand the importance ofbalancing game and screen time withother parts of their lives.• To identify the positive and negativeinfluences of technology on health andthe environment. | **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 Internetconsists of.• To find out what a LAN and a WANare.• To find out how the Internet isaccessed 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 areused as the basis for representing alltypes of data in digital systems.• To recognise that digital systemsrepresent all types of data usingnumber codes that ultimately arepatterns of 1s and 0s (called binarydigits, which is why they are calleddigital systems).• To understand that binary representsnumbers using 1s and 0s and theserepresent the on and off electricalstates respectively in hardware androbotics.  |
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