Computing Cycle A & B Overview

Cycle A – 2022 onwards - (beginning on even academic years)

	Reception	Year 1 and 2	Year 3 and 4	Year 5 and 6
Autumn 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	Information Technology Getting started NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Digital Literacy Online Safety NC: Recognise acceptable and unacceptable behaviour using technology. Use technology safely, respectfully and responsibly. Identify a range of ways to report concerns about content and contact.	Digital Literacy Online Safety NC: use technology safely, respectfully and responsibly.
Autumn 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	Digital Literacy Effective Searching Information Technology Making Music NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Digital Literacy Effective Searching NC: Use search tech effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content. NC: Identify a range of ways to report concerns about content and contact.	Computer Science Coding NC: use sequence, selection, and repetition in programs; work with variables and various forms of input and output

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			NC: Select, use and combine a variety of content to accomplish given goals, including collecting, analysing, evaluating and presenting data and information NC: Understand what computer networks do and how they provide multiple services.	
Spring 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Information Technology</u> <u>Spreadsheets</u> <u>Presenting Ideas</u> NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	<u>Information Technology</u> <u>Spreadsheets</u> NC: 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. NC: Use logical reasoning to explain how some simple algorithms work and	<u>Computer Science</u> <u>Networks</u> NC: 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 NC: use search technologies effectively, appreciate how results are selected and ranked, and

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			to detect and correct errors in algorithms and programs	be discerning in evaluating digital content.
Spring 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Information Technology Creating Pictures</u> NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	<u>Information Technology Sharing and Presenting ideas</u> NC: 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.	<u>Computer Science Coding</u> NC: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts NC: use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
Summer 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Digital Literacy Online safety</u> NC: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns	<u>Algorithms and programming - Logo</u> NC: Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	<u>Information Technology Animation</u> NC: select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of

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		about content or contact on the internet or other online technologies.	NC: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
Summer 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Computer Science</u> <u>Coding</u> NC: Create and debug simple programs; Use logical reasoning to predict the behaviour of simple programs NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	<u>Algorithms and programming</u> <u>Coding</u> NC: Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. NC: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	<u>Digital Literacy</u> <u>Online Safety</u> NC: recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

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Cycle B – 2023 onwards - (beginning on odd academic years)

	Reception	Year 1 and 2	Year 3 and 4	Year 5 and 6
Autumn 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	Digital Literacy Logging on and using PM NC: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Digital Literacy Online Safety NC: Use technology respectfully and responsibly. NC: Identify a range of ways to report concerns about content and contact.	Digital Literacy Online Safety NC: use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Autumn 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	Information Technology Getting started NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Digital Literacy Email NC: Understand what computer networks do and how they provide multiple services.	Computer Science Coding NC: use repetition in programs; work with variables NC: design, write and debug programs that accomplish specific goals including controlling or simulating physical systems; solve problems by decomposing them into small parts
Spring 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	Information Technology Pictograms and spreadsheets NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology Branching Databases NC: select, use and combine a variety of software (including internet services) on a range of digital devices to design and	Information Technology Word Processing NC: select, use and combine a variety of software (including internet services) on a range of digital devices to design an

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			create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Manipulate and improve digital images	create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. NC: use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
Spring 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Computer Science</u> <u>Coding</u> NC: Create and debug simple programs; Use logical reasoning to predict the behaviour of simple programs NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	<u>Information Technology</u> <u>Spreadsheets & Graphing</u> NC: 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	<u>Computer Science</u> <u>Coding</u> NC: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts NC: use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
Summer 1	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules,	<u>Digital Literacy</u> <u>Technology outside of school</u> NC: Recognise common uses of information technology beyond school	<u>Algorithms and programming</u> <u>Coding/simulations</u> N.C: Design a sequence of instructions including directional instructions	<u>Information Technology</u> <u>Spreadsheets</u> NC: select, use and combine a variety of software (including internet services) on a range of

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	know right from wrong and behave accordingly.		N.C Write programs that accomplish specific goals NC: Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	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
Summer 2	Technology aspects including beebots, remote control devices. Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	<u>Information Technology</u> <u>Animated story</u> NC: use logical reasoning to predict the behaviour of simple programs. NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	<u>Algorithms and programming</u> <u>Coding/simulations</u> N.C: Design a sequence of instructions including directional instructions N.C Write programs that accomplish specific goals NC: Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	<u>Information Technology</u> <u>3D Modelling</u> NC: 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