Computing Cycle A & B Overview

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

	Reception	Year 1	Year 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 Effective Searching Information Technology Making Music 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.	Information Technology Getting started NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology Creating Pictures 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	Computer Science Coding NC: use sequence, selection, and repetition in programs; work with variables and various forms of input and output

				contact. 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 Pictograms and spreadsheets</u> NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	<u>Information Technology Spreadsheets Presenting Ideas</u> NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	<u>Information Technology 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	<u>Computer Science 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 be discerning in

				how some simple algorithms work and to detect and correct errors in algorithms and programs	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 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 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	<u>Digital Literacy Technology outside of school</u> NC: Recognise common uses of information	<u>Digital Literacy Online safety</u> NC: Use technology safely and respectfully, keeping personal	<u>Algorithms and programming - Logo</u> NC: Use sequence, selection, and repetition in programs;	<u>Information Technology Animation</u> NC: select, use and combine a variety of software (including

	reasons for rules, know right from wrong and behave accordingly.	technology beyond school	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.	work with variables and various forms of input and output. NC: Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	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
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 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>Computer Science 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 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	<u>Digital Literacy Online Safety</u> NC: recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

			problems by decomposing them into smaller parts	

Computing Cycle A & B Overview
Cycle B – 2023 onwards - (beginning on odd academic years)

	Reception	Year 1	Year 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	Information Technology Getting started NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	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 Effective Searching Information Technology Making Music 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 Spreadsheets Presenting Ideas 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 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	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 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.	Computer Science Coding NC: Create and debug simple programs; Use logical reasoning to predict the behaviour of simple programs	Information Technology Creating Pictures NC: use technology purposefully to create, organise, store, manipulate and retrieve digital content	Information Technology Spreadsheets & Graphing NC: select, use and combine a variety of software (including internet services) on a range of digital devices	Computer Science Coding NC: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems

		NC: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions		to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	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.	Digital Literacy Technology outside of school NC: Recognise common uses of information technology beyond school	Digital Literacy Online safety 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.	Algorithms and programming Coding/simulations 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	Information Technology Spreadsheets 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
Summer 2	Technology aspects including beebots, remote control devices.	Information Technology Animated story	Computer Science Coding NC: Create and debug simple programs; Use	Algorithms and programming Coding/simulations	Information Technology 3D Modelling NC: select, use and combine a variety of

	Online Safety is also covered – explain the reasons for rules, know right from wrong and behave accordingly.	NC: use logical reasoning to predict the behaviour of simple programs. NC: Use technology purposefully to create, organise, store, manipulate and retrieve digital content	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	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	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