Computing Curriculum Milestones

Year 1	Create a simple algorithm with up to 4 commands to control movement of a Bee-Bot or Sprite in Scratch Jr. Predict the outcome and debug
Year 1	Create and debug simple programs with up to 4 commands using the four direction commands to control a Bee-bot or Sprite in Scratch Jr.
Year 1	Use logical reasoning to predict the behaviour of simple programs with up to 4 commands
Year 1	Use a range of age appropriate programs to create, edit, store and retrieve digital content
Year 1	Recognise common uses of technology
Year 1	Understand that rules are needed to keep us safe and healthy when using technology in school. Able to provide an example of these rules and explain how it benefits us
Year 1	Use a password to log on, open and close programs
Year 1	Save and retrieve work
Year 2	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
Year 2	Create and debug simple programs
Year 2	Use logical reasoning to predict the behaviour of simple programs
Year 2	Use technology purposefully to create, organise, store, manipulate and retrieve digital content
Year 2	Recognise common uses of information technology
Year 2	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
Year 3	Design, write and debug programs that include sequencing using Scratch; solve problems by decomposing them into smaller parts
Year 3	Use sequence in programs using Scratch. Understand that digital devices accept inputs, follow a process and produce outputs
Year 3	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs when using Scratch to create code that includes sequence
Year 3	Understand what a computer network is and the role of each network component. Identify the benefits of computer networks
Year 3	Use search technologies effectively, understand that multiple key words are needed to narrow searches
Year 3	Use a range of techniques to create a stop-frame animation. Use desktop publishing software to create a magazine front cover. Create a digital branching database using the online database tool j2data
Year 3	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Year 4	Design, write and debug programs that include repetition using Logo and Scratch; solve problems by decomposing them into smaller parts
Year 4	Use repetition in programs using Scratch and Logo. Understand that sensors are input devices that can be used for data collection
Year 4	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs when using Scratch and Logo to create code that includes repetition
Year 4	Understand what the Internet and the World Wide Web are and the benefits they provide. Understand that content is created, owned and shared by people
Year 4	Use search technologies effectively and evaluate the reliability of digital content and the consequences of unreliable content
Year 4	Create, save and edit audio files to produce a Podcast. Understand how digital images can be edited, resaved and reused. Use a sensor to monitor the environment and collect data. Use a computer to review and analyse the data
Year 4	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
Year 5	Design, write and debug programs that include selection using Scratch and physical computing; solve problems by decomposing them into smaller parts
Year 5	Use selection in programs using Scratch and physical computing. Understand the input, output and process aspects of different real-world systems
Year 5	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs when using Scratch and physical computing to create code that includes selection
Year 5	Understand how data is transferred and that connections between computers allow us to share information and work collaboratively regardless of location
Year 5	Use advanced search techniques such as AND and OR to refine data selection
Year 5	Use the Google drawings app to create vector images made up of shapes. Capture and edit video images to create a short video. Use j2data sample databases to organise data in records and to create graphs and charts to solve problems
Year 5	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
Year 6	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
Year 6	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
Year 6	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
Year 6	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

Year 6	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
Year 6	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
Year 6	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact