Whole School Overview – Computing Curriculum

Year Group	Autumn 1st Half	Autumn 2nd Half	Spring 1st Half	Spring 2nd Half	Summer 1st Half	Summer 2nd Half
Year 1	Using programmable toys (Beebots) understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs	Logging onto laptops use technology safely and respectfully, keeping personal information private	Illustrating a book (2 simple 2 paint) use technology purposefully to create, organise, store manipulate and retrieve digital content	Finding images using the web identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Producing a talking book (sound recording equipment) Using keezy on ipads to record sounds and produce a musical piece recognise common uses of information technology beyond school	Coding and algorithms understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs create and debug simple programs use logical reasoning to predict the behaviour of simple programs
Year 2	Year 2 – algorithms (coding using purple mash) understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs create and debug simple programs use logical reasoning to predict the behaviour of simple programs	Games testers understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions use logical reasoning to predict the behaviour of simple programs recognise common uses of information technology beyond school use technology safely and respectfully, keeping personal information private	Researching (search engines) 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	Photography (taking better photos) use technology purposefully to create, organise, store manipulate and retrieve digital content Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	Collecting clues (email) use technology purposefully to create, organise, store manipulate and retrieve digital content recognise common uses of information technology beyond school 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	Collecting data about bugs (tally charts/digital photographs) use technology purposefully to create, organise, store manipulate and retrieve digital content recognise common uses of information technology beyond school 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 and 4 Year 1	Word Processing – fonts, colours, manipulation of images etc Select, use and combine a variety of software on a range of digital devices to design and create a range of	Book Creator – Vikings Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including	Stop Frame Animation – variety of objects – e.g lego men, lego, magazines – words and pictures Select, use and combine a variety of software on a range of digital devices to design and create a range of	Green Screening – tour guides around London Internet searches – how it works/esafety use search engines technologies effectively, appreciate how results are selected and ranked, and be	Coding – scratch Branching databases? Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve	Coding – scratch Internet searches Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve

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	programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	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 use search engines technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	discerning in evaluating digital content use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	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.	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.
Year 3 and 4	Powerpoint – features Select, use and combine a variety of software 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	Publisher/Word – invitations, recipe cards, letters Select, use and combine a variety of software 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	Internet research – search engines – how they work/esafety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact use search engines technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Logo/scratch Databases 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.	Scratch – coding 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.	Crumble – introduction 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.
Year 5 and 6	Spreadsheets Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including	Movie Maker Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including	Scratch/python	Probots – programming	Crumble	Publisher/Art Select, use and combine a variety of software 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	collecting, analysing, evaluating and presenting data and information				collecting, analysing, evaluating and presenting data and information
Year 5 and 6	Spreadsheets Select, use and combine a variety of software 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	Scratch – coding 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.	Scratch – coding 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.	Powerpoint – hyperlinks Select, use and combine a variety of software 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	Green screening – tour guide Select, use and combine a variety of software 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	computer networks/search engines 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact