Progression Map: Computing   PoS Descriptors

Year	Unit 1 Programming	Unit 2 Computational Thinking	Unit 3 Creativity	Unit 4 Computer Networks	Unit 5 Communication and Collaboration	Unit 6 Productivity
EYFS						
Year 1	**Unit 1.1 – We are Treasure Hunters•** 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. Use logical reasoning to predict the behaviour of simple programs.	**Unit 1.2 – We are TV Chefs** Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Use logical reasoning to predict the behaviour of simple programs.	**Unit 1.3 – We are Painters** 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.	**Unit 1.4 – We are collectors** Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. 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. Recognise common uses of information technology beyond school.	**Unit 1.5 – We are storytellers** 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	**Unit 1.6 – We are celebrating** 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 2	**Unit 2.1 – We are**	**Unit 2.2 – We are**	**Unit 2.3 – We are**	**Unit 2.4 – We are**	**Unit 2.5 – We are**	**Unit 2.6 – We are**

	astronauts	games testers	photographers	Researchers	detectives	zoologists
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Year 3	**Unit 3.1 – We are Programmers** Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts. Use sequence in programs; work with variables and various forms of input and output. Use logical reasoning to detect and correct errors in algorithms and programs. Select, use and combine a variety of software to design and create content that accomplish(es) given goals, including presenting information.	**Unit 3.2 – We are Bug Fixers** Debug programs that accomplish specific goals. 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.	**Unit 3.3 – We are Presenters** 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. Work with various forms of input and output. Use technology safely, respectfully and responsibly.	**Unit 3.4 – We are Vloggers** Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web. 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 content that accomplish given goals, including collecting, analysing, evaluating and presenting information. Use technology safely,	**Unit 3.5 – We are Communicators** 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. 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	**Unit 3.6 – We are Opinion Pollsters** 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. 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.

				respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	behaviour; identify a range of ways to report concerns about content and contact.	
Year 4	**Unit 4.1 – We are software developers** Design, write and debug programs that accomplish specific goals. 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.	**Unit 4.2 – We are toy designers** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. Use sequence, selection, and repetition in programs; work with 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.	**Unit 4.3 – We are musicians** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Understand computer networks including the internet; and the opportunities they offer for communication and collaboration. 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.	**Unit 4.4 – We are HTML editors** 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 technology safely, respectfully and responsibly; know a range of ways to report concerns and unacceptable behaviour. Use and combine a variety of software (including internet services) to accomplish given goals, including presenting information.	**Unit 4.5 – We are co-authors** Solve problems by decomposing them into smaller parts. 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. Use a variety of software (including internet services) to create content including presenting information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Unit 4.6 – We are meteorologists** Work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work. 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.
Year 5	**Unit 5.1 – We are game developers** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve	**Unit 5.2 – We are cryptographers** Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	**Unit 5.3 – We are artists** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.	**Unit 5.4 – We are web developers** Understand computer networks including the internet; how they can provide multiple services, such as the world wide	**Unit 5.5 – We are bloggers** Understand computer networks including the internet;how they can provide multiple services,	**Unit 5.6 – We are architects** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital

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. 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.	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 technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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.	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.	such as the world wide web; and the opportunities they offer for communication and collaboration. 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. Be discerning in evaluating digital content.	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.
Year 6	**Unit 6.1 – We are adventure gamers** 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	**Unit 6.2 – We are computational thinkers** Design, write and debug programs that accomplish specific goals. 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.	**Unit 6.3 – We are advertisers** 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,	**Unit 6.4 – We are network technicians** 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 technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Unit 6.5 – We are travel writers** 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	**Unit 6.6 – We are publishers** Understand computer networks including the internet 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

| | algorithms and programs. | | evaluating and presenting data and information.

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