

Computing Progression of Skills 2022/23

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Continuous provision	Computing Systems and Networks 1: Using a Computer	Programming 1: All About Instructions	Computing Systems and Networks 2: Exploring Hardware	Programming 2: Programming Bee-Bots	Data Handling: Introduction to Data
		<ul style="list-style-type: none"> • Physical Development <ul style="list-style-type: none"> -Develop their small motor skills so that they can use a range of tools competently, safely and confidently. 	<ul style="list-style-type: none"> • Communication and Language <ul style="list-style-type: none"> -Understand how to listen carefully and why listening is important. -Describe events in some detail. -Use talk to help work our problems and organise thinking and activities, and to explain how things work and why they might happen. • Personal, Social and Emotional Development <ul style="list-style-type: none"> -ELG: Self-Regulation> Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. 	<ul style="list-style-type: none"> • Communication and Language <ul style="list-style-type: none"> -Learn new vocabulary. -Use new vocabulary throughout the day. -Ask questions to find out more and to check they understand what has been said to them. -Articulate their thoughts and ideas in well-formed sentences. -Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Personal, Social and Emotional Development <ul style="list-style-type: none"> -See themselves as a valuable individual • Physical Development 	<ul style="list-style-type: none"> • Personal, Social and Emotional Development <ul style="list-style-type: none"> -ELG: Managing Self> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. 	<ul style="list-style-type: none"> • Communication and Language <ul style="list-style-type: none"> -Articulate their thoughts and ideas in well-formed sentences. -Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. -ELG: Listening, Attention and Understanding> Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions. -ELG: Listening, Attention and Understanding> Make comments about

			<p>-ELG: Managing Self> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</p> <p>-ELG: Building Relationships> Work and play cooperatively and take turns with others.</p> <ul style="list-style-type: none"> • Physical Development <p>-Know and talk about the different factors that support their overall health and wellbeing.</p> <p>-Further develop the skills they need to manage the school day successfully.</p>	<p>-Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</p> <p>-Confidently and safely use a range of large and small apparatus indoors and outside, alone and in a group.</p>		<p>what they have heard and ask questions to clarify their understanding.</p> <p>-ELG: Speaking> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</p>
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	Autumn 1	Autumn 2 / Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2 Cycle B	Y1 Programming 2: Bee-Bots Y2 Online Safety 1	Y1 Creating Media: Digital Imagery Y2 Online Safety 2 Safer internet day 2023	Y1 Data Handling: Introduction to Data Y2 Online Safety 3	Y2 Programming 1: Algorithms and debugging Y2 Online Safety 4	Y2 Creating Media: Stop Motion Y2 Online Safety 5
	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Use logical reasoning to predict the behaviour of simple programs 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 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school
	Y2 Online safety unit: <ul style="list-style-type: none"> 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 				

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3/4 Cycle A	Y3 Programming: Scratch Y3 Online Safety 1	Y3 Creating media: Video trailers Y3 Online Safety 2	Y3 Computing systems and networks: Emailing Safer internet day 2023	Y3 Data Handling: Comparison Cards Databases Y3 Online Safety 3	Y4 Programming 1: Further Coding with Scratch Y3 Online Safety 4	Y4 Programming: Computational thinking
	<ul style="list-style-type: none"> • 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 • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 behaviour; 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 • 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 	<ul style="list-style-type: none"> • 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 • 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

	<p>evaluating digital content</p> <ul style="list-style-type: none"> • 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 		<p>identify a range of ways to report concerns about content and contact</p>		<p>and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>
<p>Y3 Online safety unit:</p> <ul style="list-style-type: none"> • 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 						

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	Computing Systems and Networks: Search Engines	Y5 Online Safety	Data Handling: Mars Rover 1 Safer internet day 2023	Programming 1: Music	Programming 2: Micro:Bit	Creating Media: Stop Motion Animation
	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range 	<ul style="list-style-type: none"> • 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 • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the 	<ul style="list-style-type: none"> • 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

		concerns about content and contact		of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	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	
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	Computing Systems and Networks: Bletchley Park Online Safety 1	Creating Media: History of Computers Online Safety 2	Programming: Introduction to Python Safer internet day 2023	Skills showcase: Inventing a product Online Safety 3	Data Handling 1: Big Data 1 Online Safety 4	Data Handling: Big Data 2 Online Safety 5 Online Safety 6
	<ul style="list-style-type: none"> • 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 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and 	<ul style="list-style-type: none"> • 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 • Understand computer networks including the internet; how they can provide multiple services, such as the 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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

	<p>goals, including collecting, analysing, evaluating and presenting data and information</p> <ul style="list-style-type: none"> • Use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact 		<p>create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>world wide web; and the opportunities they offer for communication and collaboration</p> <ul style="list-style-type: none"> • 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 	<p>/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
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Y6 Online safety unit:

- 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