

Computing Medium Term Plan

	Computing Medium Term Plan Autumn 1 Autumn 2 Spring 1 Spring 2 Summar 1 Summar 2 Summar 2						
	Autumn 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1 III III III III III III III III III I	Computing Systems + Networks: Improving mouse skills Information Technology Recognise common uses of information technology beyond school. Digital Literacy 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.	Online Safety Information Technology Recognise common uses of information technology beyond school. Digital Literacy 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.	Programming 1: Algorithms Unplugged Computer Science 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.	Skills Showcase: Rocket to the Moon Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Programming 2: Bee Bot Computer Science 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.	Creating Media: Digital Imagery Computer Science Use logical reasoning to predict the behaviour of simple programs. Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Information Technology 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.	Data Handling: Introduction to Data Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Information Technology Recognise common uses of information technology beyond school.





Year 2

Computer Systems 1: What is a Computer?

Computer Systems
Understand what
algorithms are; how
they are
implemented as
programs on digital
devices; and that
programs execute by
following precise and
unambiguous
instructions.

Information Technology

Recognise common uses of information technology beyond school.

Online Safety

<u>Digital Literacy</u> 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.

Information Technology Recognise common uses of information technology beyond school.

Computer Systems 2: Word Processing

<u>Digital Literacy</u> 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.

Programming 1: Algorithms + Debugging

Computer Systems 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.

Programming 2: Scratch Jr

Computer Systems 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.

Digital Literacy

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Creating Media: Stop Motion

<u>Digital Literacy</u> Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Information Technology Recognise common uses of information technology beyond school.

Data Handling: International Space Station

Computer Systems Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.

<u>Digital Literacy</u>
Use technology purposefully to create, organise, store, manipulate and retrieve digital content.





Year 3 Computing Systems + Networks 1: Networks

Digital Literacy and Information Technology 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.

Digital Literacy
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.

Online Safety

Digital Literacy and Information Technology
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.

Digital Literacy
Use technology safely,
respectfully and
responsibly; recognise
acceptable/unacceptable
behaviour; identify a
range of ways to report
concerns about content
and contact.

Programming: Scratch

Computer Systems
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.

Digital Literacy and Information Technology
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Computer Systems and Information Technology
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.

Emailing: Google

<u>Digital Literacy and Information</u> <u>Technology</u>

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 information.

Computer Systems and Information Technology
Use technology safely,

respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Journey Inside a Computer

Computer Systems
Design, write and debug
programs that accomplish
specific goals, including
controlling or simulating
physical systems; solve
problems by decomposing
them into smaller parts.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

<u>Digital Literacy and Information</u> <u>Technology</u>

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.

Creating Media

<u>Digital Literacy and Information</u> <u>Technology</u>

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Computer Systems and Information Technology

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.

Data Handling: Comparison Cards Databases

Computer Systems and Information Technology

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	Systems and Networks:	Online Safety	Programming: Coding with Scratch	Creating Media: Website Design	Skills Showcase:	Data Handling: Investigating Weather	Programming 2: Computational Thinking
Year 4	1 '	Digital Literacy and Information Technology Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Digital Literacy Use technology safely, respectfully and responsibley; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	1 0 0	1			, ,
					acceptable/unacceptable behaviour; identify a range of		





					ways to report concerns about content and contact.		
Year 5	Data Handling: Mars River 1 Digital Literacy and Information Technology 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. Computer Systems and Information Technology 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.	Digital Literacy and Information Technology Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Computer Systems and Information Technology 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. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Skills Showcase: Mars Rover 2 Computer Systems and Information Technology 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.	Programming 1: Music Computer Systems 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. Computer Systems and Information Technology 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.	Programming 2: Micro:bit Computer Systems and Information Technology Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Computer Systems 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 opportunities they offer for communication and collaboration. Digital Literacy and Information Technology Select, use and combine a variety of software (including internet services) on a range of digital devices to design and	Creating Media: Stop motion animation Computer Systems 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.	Systems and Networks: Search Engines Digital Literacy and Information Technology 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. Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.





Voor	Creating Media:	Online Safety	Programming: Introduction	Systems and Networks:	create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Data Handling: Big Data 2	Skills Showcase: Inventing a
Year	History of Computers	Simile Surety	to Python	Bletchley Park	Big Data 1	Sata Hallaning, Dig Sata 2	product
6		<u>Digital Literacy and</u>		·		n/a	
	Digital Literacy and	Information Technology	Computer Systems	Digital Literacy and	Digital Literacy and Information		Computer Systems
	<u>Information</u>	Understand computer	Design, write and debug	Information Technology	<u>Technology</u>		Design, write and debug
	<u>Technology</u> Understand	networks including the internet; how they can	programs that accomplish specific goals, including	Understand computer networks including the	Understand computer networks including the		programs that accomplish specific goals, including
	computer networks	provide multiple services,	controlling or simulating	internet; how they can	internet; how they can provide		controlling or simulating
	including the	such as the world wide	physical systems; solve	provide multiple services,	multiple services, such as the		physical systems; solve
	internet; how they	web; and the	problems by decomposing	such as the world wide	world wide web; and the		problems by decomposing
	can provide multiple	opportunities they offer	them into smaller parts.	web; and the opportunities	opportunities they offer for		them into smaller parts.
	services, such as the	for communication and		they offer for	communication and		
	world wide web; and	collaboration.	Use sequence, selection, and	communication and	collaboration.		Use sequence, selection, and
	the opportunities	Uaa aaasah taabaalaa;aa	repetition in programs; work	collaboration.	Community Contains and		repetition in programs; work
	they offer for communication and	Use search technologies effectively, appreciate	with variables and various forms of input and output.	Use search technologies	Computer Systems and Information Technology		with variables and various forms of input and output.
	collaboration.	how results are selected	lornis or input and output.	effectively, appreciate how	Select, use and combine a		Tornis or input and output.
		and ranked, and be	Use logical reasoning to	results are selected and	variety of software (including		Use logical reasoning to explain
	Computer Systems	discerning in evaluating	explain how some simple	ranked, and be discerning	internet services) on a range of		how some simple algorithms
	and Information	digital content.	algorithms work and to	in evaluating digital	digital devices to design and		work and to detect and correct
	<u>Technology</u>		detect and correct errors in	content.	create a range of programs,		errors in algorithms and
	Select, use and	<u>Digital Literacy</u>	algorithms and programs.		systems and content that		programs.
	combine a variety of	Use technology safely,	Community Contains and	Computer Systems and	accomplish given goals,		Disital Litara are and Information
	software (including internet services) on	respectfully and responsibly; recognise	Computer Systems and Information Technology	Information Technology Select, use and combine a	including collecting, analysing, evaluating and presenting data		<u>Digital Literacy and Information</u> Technology
	a range of digital	acceptable/unacceptable	Select, use and combine a	variety of software	and information.		Understand computer
	devices to design and	behaviour; identify a	variety of software (including	(including internet services)			networks including the
	create a range of	range of ways to report	internet services) on a range	on a range of digital	<u>Digital Literacy</u>		internet; how they can provide
	programs, systems	concerns about content	of digital devices to design	devices to design and	Use technology safely,		multiple services, such as the
	and content that	and contact.	and create a range of	create a range of programs,	respectfully and responsibly;		world wide web; and the
	accomplish given		programs, systems and	systems and content that	recognise		opportunities they offer for
	goals, including collecting, analysing,		content that accomplish given goals, including	accomplish given goals, including collecting,	acceptable/unacceptable behaviour; identify a range of		communication and collaboration.
	evaluating and		collecting, analysing,	analysing, evaluating and	ways to report concerns about		Conaboration.
	presenting data and		evaluating and presenting	presenting data and	content and contact.		Use search technologies
	information.		data and information.	information.			effectively, appreciate how
							results are selected and
				<u>Digital Literacy</u>			



St Mary's Church of England Academy

	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.		ranked, and be discerning in evaluating digital content. Computer Systems and
			Information Technology 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.
			Digital Literacy Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.



