



Yr	Key concepts for all year	Knowledge/ understanding	Computing	Suggested	Key Computing enquiry	End Points
Gp	groups		Terms / key	programs/links.	questions/ Example of	
			vocabulary		P4C questions	
EYFS	Understand and apply the		e-safety	E-Safety:	P4C Stimulus /	To know the differences
	fundamental principles and	E-Safety: Sharing my use of		<u>Project Evolve</u>	Questions:	and similarities between
	concepts of computer science,	technology with an adult.	command	Childnet	Long ago and now video	the real world and the
	including abstraction, logic,				How does tech make life	online world, particularly in
	algorithms and data	Programming: Choose and	input	Programming:	easier?	relation to keeping yourself
	representation	use commands to make		Beebot iOS app		safe.
		something (robot/on screen)	technology	Daisy the Dinosaur	The Time Capsule	
	Analyse problems in	move.		iOS app	Why do people record	To understand cause and
	computational terms and have				their thoughts and	effect.
	repeated practical experience	Sharing Information: Share		Sharing Information:	ideas?	
	of writing computer programs	and record my thoughts and		Shadow Puppet /		To know that technology
	in order to solve such	ideas through technology.		Puppet Pals iOS apps	Enquiry questions	can record my ideas.
	problems.			Voice recorder	What should I do if	
		Technology and our lives:		Camera / video app	something unexpected	To operate simple
		Understand that technology			happens?	equipment and suggests
	Evaluate and apply information	is used in many places.			Did my commands	how it works.
	technology, including new or				work?	
	unfamiliar technologies,				How are the inputs the	
	analytically to solve problems				same on screen as on	
					the robot?	
					How does technology	
					help me share my ideas	
					with other people?	





1	Understand and apply the	E-Safety: Understand they	e-safety	E-Safety:	P4C Stimulus /	Understand why
	fundamental principles and	and adults have the		Project Evolve	Questions:	technology is monitored
	concepts of computer science,	responsibility to keep	Algorithm	<u>Childnet</u>	Sharing a Shell by Julia	and filtered for our safety.
	including abstraction, logic,	themselves safe online.		CEOP / ThinkUKnow	Donaldson	
	algorithms and data		Debug	Purple Mash	Are there things we	To be able to create
	representation	Programming: Use algorithms		resources	can't share?	appropriate algorithms.
		to complete a simple task	Sequence		Why should we share?	
	Analyse problems in	(with or without technology)				To be able to create and
	computational terms and have	and evaluate its effectiveness	Program	Programming:	I'm a Robot Inventor	retrieve information in a
	repeated practical experience			Beebot iOS app	<u>video</u>	range of forms.
	of writing computer programs	Sharing Information: Create,	Output		Could robots 'live'	
	in order to solve such	edit, store and retrieve		Daisy the Dinosaur	without people?	To understand the benefits
	problems.	information using a range of	File	iOS app		of technology.
		technologies.			Feeling Better: worried	
	Evaluate and apply information		Undo	2Code Chimp	Are worries normal?	
	technology, including new or	Technology and our lives:			How does sharing help	
	unfamiliar technologies,	Begin to understand the	Font	Sharing information:	ease worries?	
	analytically to solve problems	benefits of technology		Skitch /Shadow		
		depending on the purpose.	Data	Puppet / Puppet Pals	Enquiry questions	
				iOS apps	What should I do if	
			Image	Voice recorder	something unexpected	
				Dictation tools to see	happens?	
			Delete	voice into text		
				Camera / video app	Can you recognise	
					which part of your	
					code/instructions are	
					incorrect?	
	The decorate and a set of	5 Cofee Hoderstand II - 5	B I	E C. (.)	DAG SILVE L. A.	T. I
2	Understand and apply the	E-Safety: Understand the safe	Personal	E-Safety:	P4C Stimulus /	To know what personal
	fundamental principles and	use of personal information	A	Project Evolve	Questions	information means and
	concepts of computer science,	online. Show awareness of	Appropriate	<u>Childnet</u>	Dogs React to Robot	how to keep this safe both
	including abstraction, logic,			Newsround	Dog	





	algorithms and data representation	age appropriate websites and apps.	Share	CEOP / ThinkUKnow	Could you ever love a robot?	online, and in the real world.
	representation		Social media	Programming:	Could a robot love you?	
	Analyse problems in	Programming: Understand		Hopscotch iOS app	Are there some jobs	To be able to create an
	computational terms and have	algorithms can be applied in	Profile	Daisy the Dinosaur	robots could never do?	algorithm and refine for
	repeated practical experience	different contexts. Develop		iOS app		effect (debug). Begin to
	of writing computer programs	more complex algorithms and	Permissions		Personal info video	develop an understanding
	in order to solve such	understand how to debug.		2Code Chimp	Can you know too much	of efficiency.
	problems.		Sprite	Scratch Jr	about a person? How?	
	Evaluate and apply information	Sharing Information: Create,		Lego Wedo		To be able to create and
	technology, including new or	edit and save information for	Background		Messages through time	retrieve information in an
	unfamiliar technologies,	a given purpose, paying		Sharing Information:	What is the safest way	increasingly wide range of
	analytically to solve problems	attention to the intended	Scale	2Create a story	to send a secret	forms appropriate to the
		audience.		Office 365 tools	message?	audience.
			Action	Dictation tools to see		
		Technology and our lives:		voice into text	Enquiry questions	To understand the benefits
		Explore how and why	Block	2Paint	What should I do if	of technology for
		different people use		Camera / video app	something unexpected	communication and
		technology to communicate	Copy / paste	Book Creator /	happens?	collaboration across a wide
		information.		Skitch / Shadow		range of audiences.
			Undo	Puppet / Puppet Pals	Can you recognise and	
				iOS apps	alter the part of your	
			Audience	Imovie / Microsoft	code which was	
				Photos	incorrect? Was the	
				GarageBand	change successful?	
				2Sequence		
				Sampulator		
3	Understand and apply the	E-Safety: Recognise	Deconstruct	E-Safety:	P4C Questions	To be able to identify and
	fundamental principles and	acceptable and unacceptable		BBC Own it	How the Internet Works	correct inappropriate or
	concepts of computer science,	behaviour when using	Variable	Project Evolve	Could we live without	naïve online behaviour in a
	including abstraction, logic,	different technologies, who		Childnet	the Internet?	range of scenarios.
		to report it to and how.	Timer	CEOP / ThinkUKnow		





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algorithms and data				Online vs Real World	Create a simple
representation	Programming: Use a block	Repeat	Programming:	Can you spend too long	game/animation/presentat
	language to create a program		Hopscotch iOS app	online?	ion using a block
Analyse problems in	to achieve a specific	Event	Pyonkee app		programming software
computational terms and have	outcome.		<u>Lightbot app</u>	<u>Digital Etiquette</u>	such as Scratch Jnr/Scratch,
repeated practical experience	Refine and review pre-written	CEOP		Is there still an online	Discovery coding, Pyonkee.
of writing computer programs	algorithms.		2Code Gibbon	world and an offline	
in order to solve such		Password	Scratch Jr / Scratch	world, or is it just 'The	To experience a variety of
problems.	Sharing Information: Planning		Lego Wedo	World'?	software packages and
	content to input into given	Username	Minecraft Edu		their strengths and
Evaluate and apply information	applications. Evaluating the			Is it always OK to	weaknesses.
technology, including new or	end result of their own work	Blog	Sharing Information:	believe what you find	
unfamiliar technologies,	against the desired outcome.		2Create a story	on the internet?	
analytically to solve problems		PEGI rating	Office 365 tools		
	Technology and our lives:		2Paint a Picture	What would you	
	Recognise the Internet as a	Software	Book Creator /	uninvent?	
	giant network of		Skitch / Shadow		
	communication and how the	Simulation	Puppet / Puppet Pals	Enquiry questions	
	school network fits within		iOS apps	What should I do if	
	this.	Media	Imovie / Microsoft	something unexpected	
			Photos	happens?	
		Spreadsheet	<u>lunapic</u>		
			<u>Drumbit</u>		
		Cells	<u>Musiclab</u>		
			<u>Prezi</u>		
		Format			
		Draft			
		Network			
		System			





4	Understand and apply the	E-Safety: Understand the	If	E-Safety:	P4C Stimulus /	To know the consequences
	fundamental principles and	rules and consequences of		BBC Own it	Questions	of poor behaviour online
	concepts of computer science,	their online behaviour.	Else	Project Evolve	Children's Rights	and how to avoid this
	including abstraction, logic,			Childnet	Should you be able to	happening.
	algorithms and data	Programming: Use logical	Selection	CEOP / ThinkUKnow	write or say anything	
	representation	reasoning to detect and fix			you like online?	Create a
		errors in programmes.	Virus	Programming:		game/animation/presentat
	Analyse problems in			Hopscotch iOS app	Would we be happier	ion using a block
	computational terms and have	Sharing Information: Planning	Phishing	Pyonkee app	without technology?	programming software
	repeated practical experience	content to input into		Lightbot app		such as Scratch, Discovery
	of writing computer programs	applications choosing the	Copyright		What is 'real'?	coding, Pyonkee.
	in order to solve such	most appropriate and		2Code Gibbon	What s choice?	Debug coding to improve
	problems.	effective one. Evaluating the	Plagiarism	<u>Scratch</u>		outcome.
		end result of others against		Lego Wedo	Intellectual Property	
	Evaluate and apply information	the desired outcome and	Spam	Minecraft Edu	<u>Fatima or Desire'e video</u>	Choose and justify a
	technology, including new or	giving feedback.			<u>Article</u>	software package
	unfamiliar technologies,		Encrypted	Sharing Information:	The government should	independently that will
	analytically to solve problems	Technology and our lives:		2Create a story	be allowed to use	meet an end goal.
		Recognise that information		Office 365 tools	whatever they want,	
		on the Internet is owned.		2Paint a Picture	right?	
		(Copyright).		Book Creator /		
				Skitch / Shadow	Enquiry questions	
				Puppet / Puppet Pals	What should I do if	
				iOS apps	something unexpected	
				Imovie / Microsoft	happens?	
				Photos		
				<u>lunapic</u>		
				<u>Drumbit</u>		
				<u>Musiclab</u>		
				<u>Prezi</u>		





5	Understand and apply the	E-Safety: Respectful use of	Digital	E-Safety:	P4C Stimulus /	To understand that
	fundamental principles and	mobile technology and how	footprint	BBC Own it	Questions	information put online
	concepts of computer science,	our digital footprint is		Project Evolve	What is a Digital	never goes away.
	including abstraction, logic,	created.	Consequences	Childnet	Footprint?	
	algorithms and data			CEOP / ThinkUKnow	Should what you do in	To understand that
	representation	Programming: Decompose	Encryption		your past affect how	decisions pupils make
		longer and more complex		Programming:	people view you in your	online can impact theirs
	Analyse problems in	programmes to detect and	Spoof site	Hopscotch iOS app	future?	and others future.
	computational terms and have	debug errors.		2Code Gorilla		
	repeated practical experience		Browser	Pyonkee app	Does technology change	Create a
	of writing computer programs	Sharing Information: Planning		<u>Scratch</u>	human nature?	game/animation/presentat
	in order to solve such	content to input into	Concept	Lego Mindstorms		ion using a block
	problems.	applications including		Pluralsight (HTML	Is there a "natural" way	programming software
	Evaluate and apply information	combining different	Alert	intro for kids)	for humans to live?	such as Scratch, Discovery
	technology, including new or	applications, on different		Flowol		coding, Pyonkee, Flowol or
	unfamiliar technologies,	devices, to produce quality	Programming	Minecraft Edu	Does what you say	Twinery.
	analytically to solve problems	work.	language		depend on where you	Debug and refine coding
		Evaluating throughout the		Sharing Information:	say it?	continually throughout the
		process adapting plans as	Selection	Office 365 tools		process to improve end
		needed.		Book Creator /	Enquiry questions	outcome.
				Skitch / Shadow	What should I do if	Apply knowledge and
		Technology and our lives:		Puppet /	something unexpected	understanding to choose
		Recognise the importance of		Imovie / Microsoft	happens?	an appropriate
		accurate searching online and		Photos		combination of software
		able to reflect on the results.		<u>lunapic</u>	Tree Octopus	packages which are fit for
				GarageBand app	Without books, could	purpose.
				<u>Drumbit</u>	there be an internet?	
				<u>Prezi</u>	Is most of the internet	
				Twine (interactive stories /	'fake'?	
				branching data)		
				<u>Soundation</u>		





6	Understand and apply the	E-Safety: Recognise	Concept map	E-Safety:	P4C Stimulus /	To understand that
	fundamental principles and	acceptable and unacceptable		BBC Own it	Questions	information put online
	concepts of computer science,	behaviour	Function	<u>Project Evolve</u>	Body Image	never goes away.
	including abstraction, logic,	when using social media		<u>Childnet</u>	Are influencers' lives	
	algorithms and data	including how I present	Random	CEOP / ThinkUKnow	perfect?	To understand that how
	representation	myself online.				you portray yourself online
			Machine code	Programming:	Are video games bad for	is how others will see you.
	Analyse problems in	Programming: Simplify code		Hopscotch iOS app	me?	
	computational terms and have	to make it more efficient and	LAN / WAN	2Code Gorilla	Should violent video	Create an increasingly
	repeated practical experience	apply decomposing skills in a		Pyonkee app	games be banned?	complex
	of writing computer programs	variety of contexts making	Intitle	<u>Scratch</u>		game/animation/presentat
	in order to solve such	links between different		Lego Mindstorms	Are Humans Getting	ion using a block
	problems.	programmes.	related	Pluralsight (HTML	<u>Cleverer?</u>	programming software
				intro for kids)	Has the internet made	such as Scratch, Discovery
	Evaluate and apply information	Sharing Information: Planning		Flowol	us less or more	coding orPyonkee
	technology, including new or	content to input into		Minecraft Edu	intelligent?	Other 'languages' / formats
	unfamiliar technologies,	applications including				- Flowol / Flowgo (see D
	analytically to solve problems	combining different		Sharing Information:	Can we choose to	and T plan) or Twinery.
		applications, on different		Office 365 tools	ignore technology?	
		devices, to produce quality		Book Creator /		Debug and refine coding
		work.		Skitch / Shadow	Who is to blame if a	continually throughout the
		Digitally discerning?		Puppet /	robot car does not allow	process to improve end
		Evaluating throughout the		Imovie / Microsoft	for human error?	outcome and be able to
		process adapting plans as		Photos		justify decisions made.
		needed.		<u>lunapic</u>	When does something	
				GarageBand app	we choose to do make	Apply knowledge and
		Technology and our lives:		<u>Drumbit</u>	us unhappy?	understanding to choose
		Recognise the importance of		<u>Prezi</u>		an appropriate
		accurate searching online and		Twine (interactive stories /	What makes us trust or	combination of software
		is this information		branching data)	distrust other people?	packages which are fit for
		trustworthy. (Sponsored		Soundation		purpose and with the
		sites).			Enquiry questions	target audience in mind.





			FRIMARI RSA ACADEMI
	Tech & Lives:	What should I do if	
	Bitesize Searches 1	something unexpected	
	Searches 2	happens?	
	Google tips		