

	EYFS					
Term	Autumn 1	Autumn 1	Spring 1	Spring 2	Summer 1	Summer 2
Computing				8 th Feb – Internet		
Events				Safety Day		
Key Vocab						Algorithm, instructions, set of rules, sequencing, program.
Teaching Topics						Understand what algorithms are.
						Barefoot resources: - Lego building algorithm.
						I can say what an algorithm is.
						I can verbally say clear instructions for someone else to follow.
						I can write a basic algorithm.
						I can change my algorithm with adult support.



	Year 1					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
		8 th Feb – Internet Safety Day				
Algorithm, instructions, set of rules, sequencing, program, decomposition programming, perseverance, bugs, errors,	Program, debugging, problem, computational thinking, coding, problem solving	Programming, logic, algorithms, tinkering, collaborating, Program, algorithm, set of rules, Debugging, bug, perseverance,	Logic, programming, tinkering, computational thinking, debugging	Rules, health, well-being, lifestyle, technology, positive, negative, engaged, support, features, data.	Online, internet, reputation, protection, information, support, identity, difficulties, search engines.	
Understand what algorithms are Understand how	Understand that programs execute by following precise and	Create and debug simple programs	Use logical reasoning to predict the behaviour of	Health, well-being, and lifestyle	Online reputations and managing online information.	
algorithms are implemented as programs on digital devices.	instructions Use the program Scratch Jr to help with	 Bee-bots Scratch tinkering activity. Pizza pickle 	simple programs Barefoot resources: - World map	that help keep us safe and healthy in and beyond the home when using	I can explain how I represent myself in different ways online.	
 Lego building algorithm. Crazy character algorithm. 	I can explain what computational thinking is. I can explain what	debugging - Bee-bots - River crossing. Use the program Scratch Jr to help with this topic	activity. I can explain what logical reasoning is. I can predict what a program will do.	I can give some examples of ways to stay fit and healthy.	I can explain ways in which and why I might change my identity depending on what I am doing online (avatar)	
	Algorithm, instructions, set of rules, sequencing, program, decomposition programming, perseverance, bugs, errors, Understand what algorithms are Understand how algorithms are implemented as programs on digital devices. Barefoot resources: - Lego building algorithm. - Crazy character	Algorithm, instructions, set of rules, sequencing, program, decomposition programming, perseverance, bugs, errors,Program, debugging, problem, computational thinking, coding, problem solvingUnderstand what algorithms areUnderstand that programs execute by following precise and unambiguous instructionsUnderstand how algorithms are implemented as programs on digital devices.Understand that programs on digital devicesLego building algorithm.Use the program Scratch Jr to help with this topic-Lego building algorithm.I can explain what computational thinking is.	Algorithm, instructions, set of rules, sequencing, program, decomposition programming, perseverance, bugs, errors,Program, debugging, problem, computational thinking, coding, problem solvingProgramming, logic, algorithms, tinkering, collaborating, Program, algorithm, set of rules, Debugging, bug, perseverance,Understand what algorithms are implemented as programs on digital devices.Understand that programs execute by following precise and unambiguous instructionsCreate and debug simple programsUse the program algorithm.Use the program Scratch Jr to help with this topicBarefoot resources: - Scratch tinkering activityLego building algorithm.I can explain what thinking is River crossingCrazy character algorithm.I can explain what- River crossing.	NormalizedStringS	Algorithm, instructions, set of rules, sequencing, program, decomposition programming, perseverance, bugs, errors,Program, debugging, problem, computational thinking, coding, problem solvingProgramming, logic, algorithms, tinkering, collaborating, program, algorithms are implemented as programs on digital devices. Barefoot resources: - Lego building algorithm.Program debugging, programs execute by following precise and unambiguous instructionsProgram algorithm, set of rules, Debugging, bug, perseverance,Logic, programming, tinkering, computational thinking, debuggingRules, health, well-being, lifestyle, technology, positive, negative, engaged, support, features, data.Understand what algorithms are implemented as programs on digital devices. Barefoot resources: - Lego building algorithm.Understand that programs execute by following precise and unambiguous instructionsCreate and debug simple programsUse the program setof resources: - Bee-bots - Scratch tinkering activity.Use the program setof resources: - Bee-bots - Scratch tinkering activity.Use the programs and beyond the home when using technology.1 can explain what character algorithm.1 can explain what thinking is. I can explain whatUse the program Scratch Jr to help with this topic1 can predict what a program Scratch Jr to help with this topic2 core character algorithm.1 can explain whatUse the program Scratch Jr to help with this topic1 can predict what a program Scratch3 core character algorithm.1 can explain what1 can predict what a prog	



[]	- Sharing		I can use algorithms	I can explain why I	I can explain why	I can identify ways
	-	Loop identify what the	confidently.			
	sweet	I can identify what the	connuentry.	think a program	spending too much	that I put
	algorithm	problem is with my		will act in this way.	time use	information on the
	- Bee-bots	code and think of	I can explain that		technology can	internet.
		ways to fix it.	tinkering is when we try	I can identify the	sometimes have a	
			something new and	sequence of steps	negative impact on	I can recognise that I
	I can say what an	I can independently	discover what it does.	that helps the	me.	need to be careful
	algorithm is.	think of ways to solve		program run.		before I share any
		my problem.	I can explain that		I can provide	information online.
	l can write an		collaborating means	I can test my	examples of	
	algorithm.	I can identify ways to	working with a group to	commands to see if	activities where it is	I know who I should
	-	program a device	achieve the best result.	my predictions are	easy to spend a lot	ask if I am not sure if
	I can create clear	(bee-bot or Scratch Jr)		correct. Then I can	of time engaged in	I should put
	instructions for		I can explore Scratch Jr	independently	technology (games,	something online.
	someone else to	I can reflect on	for myself.	make changes to	films, videos, apps)	
	follow.	whether my solution		the algorithm to		I can describe what
		has worked.	I can gain confidence in	ensure the	I can explain how I	is appropriate to say
	l can use an		editing my algorithm on	program runs	might recognise	and do on online
	algorithm accurately.		Scratch Jr.	smoothly.	that I need support	platforms (opinions,
	с ,			,	to control my use of	likes, shares,
	I am able to improve		I can begin to make		technology and	forwards)
	my algorithm with		predictions about what		who might provide	
	support from an		my program will do.		support for this.	I can identify and
	adult.		··· U			demonstrate actions
			I can confidently write an		I can identify	to support others
			algorithm.		features and things	who are



I can explain that		online that might	experiencing
decomposition is a	I can program and debug	negatively impact	difficulties online.
breakdown of tasks	a Bee-Bot to follow my	my well-being	
into smaller	, algorithm.	(instant replying,	I can talk about how
manageable chunks.	C	negative images/	to use the internet
U	I can predict what will	text online,	to find out
l can create a	happen when the	messaging)	information.
sequence of	Bee-Bot uses my	0 0,	
instructions.	algorithm.	I can demonstrate	I can give examples
	C	ways to protect and	of how to find
l can write an	I can persevere when	manage data on my	information (voice,
algorithm.	something has gone	devices (find my	search engines)
-	wrong.	phone/ipod)	
I can program a floor	-		I can explain what
robot to move to a	I can explore different		autocomplete is and
specific point.	ways to solve the		how to choose the
	problem with my		best suggestion.
I can explain that a	algorithm.		
bug is an error in my	-		I can explain the
algorithm code.	I can debug a program		difference between
			a belief, opinion,
I can confidently	I can say what a program		and fact.
debug errors in a	will do.		
program.			



			I can explain what the bug was and how I wil fix it			
			Year 2			
Terms	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Events			8 th Feb – Internet Safety Day			
Key Vocab	Algorithm, instructions, set of rules, sequencing, program, programming, decomposition, perseverance, bugs, errors,	Program, debugging, problem, computational thinking, coding, problem solving	Programming, logic, algorithms, tinkering, collaborating, Program, algorithm, set of rules, Debugging, bug, perseverance,	Logic, programming, tinkering, computational thinking, debugging	Rules, health, well-being, lifestyle, technology, positive, negative, engaged, support, features, data.	Online, internet, reputation, protection, information, support, identity, difficulties, search engines.
Teaching	Understand what	Understand that	Create and debug	Use logical	Health, well-being,	Online reputations
Topics	algorithms are	programs execute by following precise	simple programs	reasoning to predict the behaviour of	and lifestyle	and managing online information.
	Understand how	and unambiguous	Barefoot resources:	simple programs	I can identify rules	
	algorithms are	instructions	- Bee-bots		that help keep us safe	I can explain how I
	implemented as		- Scratch	Barefoot resources:	and healthy in and	represent myself in
	programs on	Use the program	tinkering	 World map 	beyond the home	different ways online.
	digital devices	Scratch Jr to help	activity.	logic activity.	when using	
	Barefoot	with this topic	 Pizza pickle 		technology.	I can explain ways in
	resources:		scratch	I can explain what		which and why I
			debugging	logical reasoning is.		might change my



- Lego	I can explain what	- Bee-bots		I can confidently give	identity depending
building	computational	- River crossing.		some examples of	on what I am doing
_		- River crossing.		·	-
algorithm.	thinking is.		I can confidently	ways to stay fit and	online (avatar)
- Crazy		I can use algorithms	predict what a	healthy.	
character	I can explain what	confidently.	program will do.		I can confidently
algorithm.	programming is.			I can explain why	identify ways that I
- Sharing		I can explain that	I can explain why I	spending too much	put information on
sweet	I can identify what	tinkering is when we	think a program will	time using technology	the internet.
algorithm.	the problem is with	try something new	act in the way that it	can sometimes have a	
- Bee-bots	my code and think of	and discover what it	does.	negative impact on	I can recognise that I
	ways to fix it.	does.		me.	need to be careful
I can confidently			I can identify the		before I share any
say what an	I can independently	I can explain that	sequence of steps	I can provide examples	information online.
algorithm is.	think of ways to	collaborating means	that helps the	of activities where it is	
	solve my problem.	working with a group	program run.	easy to spend a lot of	I know who I should
I can write a clear		to achieve the best		time engaged in	ask if I am not sure if
algorithm.	I can identify ways to	result.	I can test my	technology (games,	I should put
	program a device		commands to see if	films, videos, apps)	something online.
I can create clear	(bee-bot or Scratch	I can work	my predictions are		_
instructions for	Jr)	collaboratively with	correct. Then I can	I can explain how I	I can describe what is
someone else to	,	my peers.	independently make	might recognise that I	appropriate to say
follow.	I can reflect		changes to the	need support to	and do on online
	effectively on	I can explore Scratch	algorithm to ensure	control my use of	platforms (opinions,
l can use an	whether my solution	Jr for myself.	the program runs	technology and who	likes, shares,
algorithm	has worked.		smoothly.	might provide support	forwards)
accurately.				for this.	
accuracely.					



			L can identify and
Less shieles	I have increasing		I can identify and
I am able to	confidence in editing	I can identify features	demonstrate actions
improve my	my algorithm on	and things online that	to support others
algorithm with	Scratch Jr.	might negatively	who are experiencing
support from an		impact my well-being	difficulties online.
adult.	I can make predictions	(instant replying,	
	about what my	negative images/ text	I can talk about how
I can explain that	program will do.	online, messaging)	to use the internet to
decomposition is a			find out information.
breakdown of tasks	I can confidently write	I can demonstrate	
into smaller	an algorithm.	ways to protect and	I can give examples of
manageable		manage data on my	how to find
chunks.	I can program and	devices (find my	information (voice,
	debug a floor robot to	phone/ipod)	search engines)
l can create a	follow my algorithm.		
sequence of			I can explain what
instructions.	I can predict what will		autocomplete is and
	happen when the		how to choose the
I can confidently	Bee-Bot/ floor robots		best suggestion.
write an algorithm.	uses my algorithm.		
			I can explain the
I can program a	I can persevere when		difference between a
floor robot to	something has gone		belief, opinion, and
move to a specific	wrong.		fact.
point.			



 iii		i
I can explain that a	I can explore different	
bug is an error in	ways to solve the	
my algorithm code.	problem with my	
	algorithm.	
I can confidently		
debug errors in a	I can debug a	
program	program.	
independently.		
	I can say what a	
	program will do.	
	I can explain what the	
	bug was and how I	
	will fix it.	
	I can persevere when	
	something has gone	
	wrong.	
	I can explore Scratch	
	Jr independently with	
	increasing confidence.	