

	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						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Computing			8 th Feb – Internet Safety				
Events			Day				
Key Vocab	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.	
Teaching	Understand what	Understand that	Create and debug	Use logical	Health, well-being,	Online reputations	
Topics	algorithms are	programs execute by	simple programs	reasoning to	and lifestyle	and managing	
		following precise and		predict the		online information.	
	Understand how	unambiguous	Barefoot resources:	behaviour of	I can identify rules		
	algorithms are	instructions	- Bee-bots	simple programs	that help keep us	I can explain how I	
	implemented as		 Scratch tinkering 		safe and healthy in	represent myself in	
	programs on	Use the program	activity.	Barefoot	and beyond the	different ways	
	digital devices.	Scratch Jr to help with	 Pizza pickle 	resources:	home when using	online.	
	Barefoot resources:	this topic	scratch	 World map 	technology.		
	 Lego building 		debugging	logic		I can explain ways in	
	algorithm.	I can explain what	- Bee-bots	activity.	I can give some	which and why I	
	- Crazy	computational	 River crossing. 		examples of ways	might change my	
	character	thinking is.		I can explain what	to stay fit and	identity depending	
	algorithm.		Use the program Scratch	logical reasoning is.	healthy.	on what I am doing	
		I can explain what	Jr to help with this topic	I can predict what		online (avatar)	
		programming is.		a program will do.			



- Sharing		I can use algorithms		I can explain why	I can identify ways
sweet	I can identify what the	confidently.	I can explain why I	spending too much	that I put
algorithm	problem is with my		think a program	time use	information on the
- Bee-bots	code and think of	I can explain that	will act in this way.	technology can	internet.
	ways to fix it.	tinkering is when we try		sometimes have a	
		something new and	I can identify the	negative impact on	I can recognise that
I can say what an	I can independently	discover what it does.	sequence of steps	me.	I need to be careful
algorithm is.	think of ways to solve		that helps the		before I share any
	my problem.	I can explain that	program run.	I can provide	information online.
I can write an		collaborating means		examples of	
algorithm.	I can identify ways to	working with a group to	I can test my	activities where it is	I know who I should
	program a device	achieve the best result.	commands to see if	easy to spend a lot	ask if I am not sure
I can create clear	(bee-bot or Scratch Jr)		my predictions are	of time engaged in	if I should put
instructions for		I can explore Scratch Jr	correct. Then I can	technology (games,	something online.
someone else to	I can reflect on	for myself.	independently	films, videos, apps)	
follow.	whether my solution		make changes to		I can describe what
	has worked.	I can gain confidence in	the algorithm to	I can explain how I	is appropriate to say
I can use an		editing my algorithm on	ensure the	might recognise	and do on online
algorithm		Scratch Jr.	program runs	that I need support	platforms (opinions,
accurately.			smoothly.	to control my use	likes, shares,
		I can begin to make		of technology and	forwards)
I am able to improve		predictions about what		who might provide	
my algorithm with		my program will do.		support for this.	I can identify and
support from an					demonstrate actions
adult.		I can confidently write		I can identify	to support others
		an 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.		negative images/	to use the internet
	I can predict what will	text online,	to find out
I can create a	happen when the Bee-	messaging)	information.
sequence of	Bot uses my algorithm.		
instructions.		I can demonstrate	I can give examples
	I can persevere when	ways to protect and	of how to find
I can write an	something has gone	manage data on my	information (voice,
algorithm.	wrong.	devices (find my	search engines)
		phone/ipod)	
I can program a floor	I can explore different		I can explain what
robot to move to a	ways to solve the		autocomplete is and
specific point.	problem with my		how to choose the
	algorithm.		best suggestion.
I can explain that a			
bug is an error in my	I can debug a program		I can explain the
algorithm code.			difference between
	I can say what a program		a belief, opinion,
I can confidently	will do.		and fact.
debug errors in a			
program.	I can explain what the		
	bug was and how I will		
	fix it		



	Year 2							
Terms	Autumn 1	Autumn 2	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, 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, protectio information, support, identity, difficulties, search engines.		
Teaching Topics	Understand what algorithms are	Understand that programs execute by following precise	Create and debug simple programs	Use logical reasoning to predict the behaviour of	Health, well-being, and lifestyle	Online reputation and managing onli 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 onli		
	digital devices	Scratch Jr to help	activity.	logic activity.	when using			
	Barefoot	with this topic	 Pizza pickle 		technology.	I can explain ways		
	resources:		scratch	I can explain what		which and why I		
	- Lego	I can explain what	debugging	logical reasoning is.	I can confidently give	might change my		
	building	computational	- Bee-bots		some examples of	identity depending		
	algorithm.	thinking is.	 River crossing. 					



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



algorithm with	my algorithm on	I can identify features	I can identify and
support from an	Scratch Jr.	and things online that	demonstrate actions
adult.		might negatively	to support others
	I can make	impact my well-being	who are experiencing
I can explain that	predictions about	(instant replying,	difficulties online.
decomposition is a	what my program will	negative images/ text	
breakdown of	do.	online, messaging)	I can talk about how
tasks into smaller		, 5 3,	to use the internet to
manageable	I can confidently	I can demonstrate	find out information.
chunks.	write an algorithm.	ways to protect and	
		manage data on my	I can give examples
I can create a	I can program and	devices (find my	of how to find
sequence of	debug a floor robot	phone/ipod)	information (voice,
instructions.	to follow my		search engines)
	algorithm.		
I can confidently			I can explain what
write an algorithm.	I can predict what will		autocomplete is and
	happen when the		how to choose the
I can program a	Bee-Bot/ floor robots		best suggestion.
floor robot to	uses my algorithm.		
move to a specific			I can explain the
point.	I can persevere when		difference between a
	something has gone		belief, opinion, and
I can explain that a	wrong.		fact.
bug is an error in			



	T		T
my algorithm	I can explore		
code.	different ways to		
	solve the problem		
I can confidently	with my algorithm.		
debug errors in a			
program	I can debug a		
independently.	program.		
, ,			
	I can say what a		
	program will do.		
	program um do:		
	I can explain what the		
	bug was and how I		
	will fix it.		
	WIII IIX IC.		
	I can persevere when		
	something has gone		
	wrong.		
	I can explore Scratch		
	Jr independently with		
	increasing		
	confidence.		