



Attainment Targets													
PROGRESSION OF KNOWLEDGE AND SKILLS			Children recognise that a range of technology is used in places such as homes and schools.  (EYFS Curriculum – Understanding the World – Technology)	They select and use technology for purposes.  (EYFS Curriculum – Understanding the World – Technology)	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	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.	
	Year Group				Computational thinking concepts & approaches	Suggested activity	Computational thinking concepts & approaches	Suggested activity	Computational thinking concepts & approaches	Suggested activity	Computational thinking concepts & approaches	Suggested activity	
	EYFS	Nursery	<p>Provide safe equipment for children to play with within the environment such as torches, radios, walkie-talkies.</p> <p>Have available robust resources with knobs, flaps, keys or shutters.</p> <p>Incorporate technology resources that children recognise into their play, such as a camera.</p>	<p>Support and extend the skills children develop as they become familiar with simple equipment, such as twisting or turning a knob.</p> <p>Draw young children's attention to pieces of ICT apparatus they see or that they use with adult supervision.</p>	<p>Following a set of instructions</p>	<p>Sequencing / ordering pictures from a story or of a routine that children follow (i.e. getting ready for school).</p>	<p>Programming Bee-Bots</p>	<p>Programme Bee-Bots with simple instructions, plan a route for your Bee-bot to follow.</p>	<p>Tinkering – changing things to see what happens.</p>	<p>Predictions matching sheets (Twinkl).</p>	<p>Basic computer skills.</p>	<p>Children to learn how to switch Ipads on, select chosen app, leave the app and then switch Ipad off.</p>	<p>Provide a range of every day materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and tape recorder.</p>
				Spotting patterns	Sorting objects (shapes; or something linked to topic).			Tinkering with Bee Bots.	Exploring the Bee Bots; what do the buttons do? Predicting what the Bee Bot might do. What happens if I do this?	Create images.	Use Fingerpaint app on Ipad to create an image.		
								Tinkering with technical toys.	Explore what happens if buttons are pressed etc. Predict what might happen.	Create music.	Use Chrome Lab: Kandinsky on IWB to create musical images.		



		<b>Reception</b>	Provide a range of materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and tape recorder. Provide a range of programmable toys, as well as equipment involving ICT, such as computers.	Encourage children to speculate on the reasons why things happen or how things work.  Support children to coordinate actions to use technology, for example, call a telephone number. Teach and encourage children to click on different icons to cause things to happen in a computer program.	Following a set of instructions	Ordering pictures from a familiar story or song.  Giving friends instructions to move around the classroom.	Decomposition. Creating a program.	Use construction to build a model, take photos at different stages to create a set of instructions.		Use Bee-Bot app on Ipad to predict the behaviour of a Bee-Bot and complete various challenges.	Create a simple animation.	Use Puppet Pals app to create a simple animation.	Provide a range of every day materials and objects to play with that work in different ways for different purposes, for example, egg whisk, torch, other household implements, pulleys, construction kits and tape recorder.	Internet safety Day.  Internet Safety resources on Twinkl.  Watch Jessie and Friends videos Episode 1 (ThinkUKnow – available on Youtube).  Resources on childnet.com (Smartie the Penguin).
					Creating patterns	Create a repeating pattern using pictures, shapes or construction.					Create music	Use song maker on Chrome Lab to create music.		
					Musical Sequences	Use Scratch (link in Barefoot resources) or Chrome Music lab Melody Maker to programme a tune onto a colour piano.					Debugging – Bee-Bot route decomposition	Verbally plan a route around a Bee-Bot course, use the route to programme Bee-Bot, debug where necessary.		
											Basic computer skills.	Children learn to switch laptop on / off, to sign into laptop and learn to use a mouse or a trackpad to move cursor around screen.		