Computing

EYFS ELG	There are no ELG statements for computing.

	Year R	Year 1	Year 2
Computer Science	**Children will have access to:** - **Interactive toys and devices *[Lightboxes, walkie talkies]***	**Understand what algorithms are and how they are implemented as programs on digital devices *[Creating instructions for each other (directions) and then for Beebots]***	**Understand what algorithms are and how they are implemented as programs on digital devices** **Understand that programs execute by following precise and unambiguous instructions** **Use logical reasoning to predict the behaviour of simple programs *[predicting the outcome of programs with Bluebots, 2go and 2code]*** **Create and debug simple programs *[identifying errors in programs with Bluebots, 2Go and 2Code]***
Vocabulary	Start, stop, play, instructions	Algorithm, instructions, order, Beebot, program, device, create	Algorithm, debug, instructions, order, clear, program, predict, create
Sticky knowledge	I can control toys and devices	All children will: Know what an algorithms and programs are. Give clear instructions to someone and create a program for a Beebot.	All children will: Understand what algorithms and programs are and how they can debug them to make things happen

	Year R	Year 1	Year 2
IT	**Children will have access to:** - **Cameras** - **Tablets** - **Walkie talkie**	**Recognise common uses of information technology beyond school *[Interactive Toys]***	**Recognise common uses of information technology beyond school *[Aircraft control and Air-traffic control [local NATs link]]***
Vocabulary	Camera, tablet, walkie talkie, smart board, laptop	Connected, electronic, interactive, IT	IT, information technology, computer, communicate, electronic, mechanical, fly-by-wire, air traffic control, network
Sticky knowledge	All children will Recognise and be able to use different devices	All children will: Know that computers are used inside some toys to make them do things when I play with them	All children will: Understand that computers work together in networks to control and guide aircraft

	Year R	Year 1	Year 2
Digital Literacy	Children will have access to: - Appropriate software	Use technology purposefully to create, organise, store, manipulate and retrieve digital content - Pictures *(2paint)* - Posters / Leaflets *(2publish)*	Use technology purposefully to create, organise, store, manipulate and retrieve digital content - Graphs (2Graph) - Presentations (Google presentation)
Vocabulary	Tap, pinch	Mouse, touchpad, touchscreen, keyboard, click, drag, save, create, type, open, cursor Paint, pen, brush Image, text PurpleMash, 2Paint, 2Publish, Google Chrome, Internet, browser, safe search	copy, paste, organise, font, size, colour, text, picture, caption, title, subheading, insert Google Slides, presentation, slide, 2Graph, Table, chart, pictogram, data Relevant
Sticky knowledge	All children will: - Be able to use apps on a tablet	All children will: - Be able to create and save a picture on 2Paint - Be able to create and save a picture and text with 2Publish - Be able to perform a simple safe search with Google	All children will: - Know that the purpose of a presentation is to share information and be able to create, organise, save, change and open a presentation. -Be able to create, organise, save, change and present data with 2Graph -Be able to find the most relevant searches with Google Safe search

	Year R	Year 1	Year 2
		READ IN CONJUNCTION WITH SAFETY PROGRESSION – ONLINE SAFETY	
E-safety	Children will have access to: Smartie the Penguin Story A (Upsetting images, Unreliable information, Talking to strangers online)	Use technology safely and respectfully. *[Digiduck 1, Detective Digiduck, SMART videos A and R]* Keeping personal information private *[Digiduck & the magic castle, SMART rule S]* Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. *[Smartie the Penguin Story B, (Pop ups and in app purchasing, Inappropriate websites for older children, Cyberbullying), SMART rule T]*	Use technology safely and respectfully *[Digiduck's Famous Friend, Digiduck Saves the Day, SMART videos M,A,R]* Keeping personal information private *[SMART video S]* Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. *[SMART videos T]*
Vocabulary	Tell, trust, adult, stranger, online	Safe, personal, private, safety, internet, trusted, tell, meet, accept, reliable	Safe, personal, private, safety, internet, trusted, tell, meet, accept, reliable, cyberbullying
Sticky knowledge	All children will: - Know to talk to someone I trust if something upsets me online	All children will: Know who to ask if they are worried about anything they experience online (T) Know to keep their personal information private (S) Know that not everything I see or hear online can be trusted (R).	All children will: Know and explain the SMART rules Know that not everyone online can be trusted.