

	EYFS	Year 1 and 2	Year 3 and 4	Year 5 and 6
Programming	<ul style="list-style-type: none"> -Give a set of instructions (algorithm) to a Beebot. Start to give instructions with a purpose. -Recognise which direction the Beebot is facing and give instructions to change the direction. 	<ul style="list-style-type: none"> -Understand and articulate what algorithms are using appropriate vocabulary. (Y1, 2 Aut) -Create, execute and debug simple programs using software such as Scratch. (Y1, 2 Aut) -Predict the behaviour of programs by observing algorithms. (Y1, 2 Aut) 	<ul style="list-style-type: none"> -Design, write and debug programs for a purpose, e.g. an animation (Y3 Aut) or an educational game (Y4 Aut). -Use logical reasoning to identify when a program is not working and debug simple programs. (Y3 Aut) (Y4 Aut). 	<ul style="list-style-type: none"> -Design, write and debug programs for a purpose, e.g. an animation (Y3 Aut) or an educational game (Y4 Aut). -Use complex functions such as loop and conditional instructions (Y5 Aut) -Use logical reasoning to explain how some algorithms work and detect and correct errors in algorithms and programs. (Y5 Aut)
Computer networks	<ul style="list-style-type: none"> -Use iPads to take pictures and recognise that a picture has been saved in the gallery and can be viewed. 	<ul style="list-style-type: none"> -Use technology to create organise, store, manipulate and retrieve digital content. (Y1 Sum) (Y2 Spr) -Edit photos using iPad software and print photos independently. (Y2 Spr) 	<ul style="list-style-type: none"> -Use Google applications such as Google Drive and Google Classroom to create, store and manipulate information. (Y3 Spr) -Use iPads to take pictures and save in the allocated folders, e.g. Pupil Drive. Then access and manipulate these photos using other technologies, such as a Chromebook. (Y3 Spr) -Understand and explain how computer networks work, such as the internet and how they can provide multiple services and 	<ul style="list-style-type: none"> -Use a range of online technologies (such as Padlet) to create collaboratively. (Y5 Sum) -Use Google applications such as Google Drive, Google Classroom, Google Sites and Google Sheets with increasing confidence and independence to create, store and manipulate information. (Y6 Aut) (Y6 Spr) -Explain cloud services, such as Google applications, and how remote networks differ to local networks.



			opportunities for collaboration. (Y3 Sum) (Y4 Sum) -Use email services to communicate effectively. (Y3 Sum)	
Creating and presenting	-Use touchscreen devices to create drawings. -Take photos and record videos. Add voice recordings to articulate their learning and understanding.	-Recognise common uses for technology beyond school. For example, children may select and use appropriate hardware and software to solve problems, create or present information. -Use Book Creator to create an eBook which contains images, drawings, text and voice recordings. (Y1 Sp) -Use Google Forms to create simple quizzes and analyse the resulting data to make conclusions. (Y2 Sum)	-Use search technologies effectively to find content that serves a specific purpose. (Y3 Spr) -Use devices to record video/music effectively. Evaluate and edit accordingly. (Y3 Spr) (Y4 Spr) -Save content using iPads and access this on other devices, showing an ability to use different technologies for different purposes. (Y3 Spr) (Y4 Spr)	-Understand and explain how HTML is used to create web pages. Use software to change web pages by editing HTML. (Y5 Spr) -Use a range of technologies (such as Padlet and Google applications) to create collaboratively. (Y5 Sum)
E-Safety	-Use ICT hardware and software safely under adult supervision. -Use safe, adult-approved search engines to retrieve information.	-Use search engines safely to find images on the internet. (Y1 Sum) -Keep personal information private and recognise the importance of secure passwords. -Identify where to go for help and support if they have concerns about their own safety when using the internet or other technologies.	-Explain and demonstrate safe use of email services such as Gmail. (Y3 Sum) -Identify where to go for help and support if they have concerns about their own safety when using the internet or other technologies. Articulate best practise for using the internet safely.	-Articulate best practise for using the internet safely and provide advice and leadership to others. (Y6 Sum) When working collaboratively, recognise the importance of safe and responsible online behaviour. -Think critically and discerningly when using search engines and other online services.



Progression in Computing Vocabulary

Computing Vocabulary

	Nur	Rec	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Aut	Programming using rabbits and carrots		2.1 We are astronauts Programming on screen Scratch/Daisy the Dinosaur (iPad) 1,2,3 Algorithm Debugging Run Coding Program Internet Wi-Fi	2.2 We are game testers Exploring how computer games work Scratch 1,2,3,6 Algorithm Debugging Run Coding Program Internet Wi-Fi	3.1 We are programmers Programming an animation Scratch 1,2,3,7 Algorithm Browser Condition Repeat/loop Debugging Input Output Cloud computing Hardware Software Run Coding Program Internet Wi-Fi	4.1 We are software developers Developing a simple educational game Scratch 1,2,3,7 Algorithm Browser Condition Repeat/loop Debugging Input Output Cloud computing Hardware Software Run Coding Program Internet Wi-Fi	5.1 We are game developers Developing an interactive game Scratch 1,2,3,7 Algorithm Browser Condition Repeat/loop Debugging Input Output Cloud computing Hardware Software Run Coding Program Internet Wi-Fi	5.4 We are web developers Creating a website Google Sites 4,5,6,7 Browser Computer network Domain name Hyperlink Internet Wi-Fi Cloud computing Hardware Software URL (Uniform Resource Locator) Website Web page Internet Safety



<p>Spr</p> <p><i>Photographers – taking photos of their own and each other’s learning</i></p> <p>Also see note below</p>	<p>1.5 We are storytellers Produce a talking book Book Creator (iPad) 4,5</p> <p>eBook Internet Wi-Fi</p>	<p>2.3 We are photographers Taking photos Google photos (formally Picasa) 4,5,6</p> <p>Browser Internet Wi-Fi Filter Editing</p>	<p>3.3 We are presenters Videoing performance iMovie Green Screen/DoInk (iPad) 4,6,7</p> <p>Browser Hardware Software Internet Wi-Fi Editing Green screen</p>	<p>4.3 We are musicians Producing digital music Auxy/Garageband (iPad) 2,4,6</p> <p>Repeat/loop Input Output Browser Cloud computing Hardware Software Internet Wi-Fi</p>	<p>4.4 We are HTML editors Editing and writing HTML X-Ray Goggles 1,4,5,7</p> <p>Browser Domain name HTML (HyperText Markup Language) Hyperlink Hardware Software URL (Uniform Resource Locator) Website Web page Coding Program</p>	<p>4.6 We are meteorologists Presenting data about the weather Google sheets 6</p> <p>Browser Data Cloud computing Spreadsheet Hardware Software Formula</p>
<p>Sum</p> <p><i>Programming using Beebots</i></p> <p>Also see note below</p>	<p>1.4 We are collectors Finding images using the web Google Chrome, Google Slides 4,5,6</p> <p>Browser Internet Wi-Fi Search engine Internet Safety</p>	<p>3.6 We are opinion pollsters Collecting and analysing data Google Forms 5</p> <p>Browser Internet Wi-Fi Data</p>	<p>3.5 We are communicators Communicating safely on the internet Gmail 4,5,6,7</p> <p>Browser Computer network Hyperlink Hardware Software</p>	<p>3.4 We are network engineers Exploring computer networks, including the internet 4</p> <p>Browser Computer network Debugging Hardware Software</p>	<p>4.5 We are co-authors Writing collaboratively (adapted from S.O. scheme) Padlet 4,6,7</p> <p>Browser Computer network Hardware Software</p>	<p>5.5 We are bloggers Sharing experiences and opinions online Blogger/ Twitter 4,5,6,7</p> <p>Browser Hyperlink Hardware Software Internet Safety</p>



				Email Internet Safety	Input Output Internet Cloud computing Server Network switch	Website Web page	
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Programming

Networks/hardware/cloud computing

The web

Internet Safety/communication

Software

