WINS SUBJECT PROGRESSION GRID

SUBJECT Computing SUBJECT LEAD Laura Rutter

ASPECT Computer Science			
	EYFS	**YEAR ONE**	**YEAR TWO**
VOCAB	Device Command	Algorithms Unambiguous instructions Programme De-bug Logical reasoning	Algorithms Unambiguous instructions Programme De-bug Logical reasoning Logical programmable steps *Precise steps*
RESOURCES/ EQUIPMENT	**Purple Mash Online Resources** Tools - Mini Mash -2Simple City -2Code Unit plans- Understanding the word- technology https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_eyfs_world_technology/Technology.pdf **Other Resources/ Equipment** Bee bots and Bee bot apps on the ipad Floor turtle	**Purple Mash Online Resources** Units Unit 1.4 Lego Builders Unit 1.5 Maze Explorers Unit 1.7 Coding Tools -2Go -2Code **Alternative apps on ipads see separate document (Ipad apps for the curriculum)**	**Purple Mash Online Resources** Units Unit 2.1 Coding Tools -2Go -2Code **Alternative apps on ipads see separate document (Ipad apps for the curriculum)**
KNOWLEDGE	-Children recognise that a range of technology is used in places such as homes and schools. Children recognise that devise follow commands either through the use of a voice or touch.	*-Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and*	*-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	unambiguous instructions. -Create and debug programs. -Use logical reasoning to predict the behaviour of simple programs -Create simple programme that achieves a purpose.
SKILLS	Be aware that some devices need commands to operate and control them, e.g., traffic lights, car park barrier, and games consoles. Understand what commands are needed to control different devices, e.g., make a noise to activate a toy; press a button to make it work. Be aware that the computer keyboard can be used to control objects on screen Begin to understand that computers can represent real or imaginary situations. Be aware that different choices made using a program on the computer can produce different outcomes. Be aware that computers can make imaginary things happen on-screen, which may not happen in real ife.	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program. Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. **The Wrong Sandwich** in Purple Mash and can write their own simple algorithm, e.g. **Colouring in a Bird activity.** Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code, e.g. **Bubbles activity in 2Code** When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in **2Go challenges** will end up	Children can explain that an algorithm is a set of instructions to complete a task. When **designing simple programs**, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code. Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. **Debug Challenges: Chimp**. Children's program designs display a growing awareness of the need for logical, programmable steps. Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.

		at the end of the program	

ASPECT Information Technology			
	EYFS	**YEAR ONE**	**YEAR TWO**
VOCAB	Photos Text Sound Click Drag Drop Pragramme	Photos Text Sound Organise Manipulate Retrieve Collate Edit Store	Photos Text Sound Organise Manipulate Retrieve Collate Edit Store
RESOURCES/ EQUIPMENT	**Purple Mash Online Resources** Tools - 2Beat 2Explore 2Design and make 2Paint a picture 2Create a story Mashcams Unit plans- Expressive arts- Being imaginative Expressive arts- Exploring and using media https://www.purplemash.com/#tab/Teachers/computing_sow/computing_sow_reception/computing_sow_e	**Purple Mash Online Resources** Units Unit 1.2 Grouping & Sorting Unit 1.3 Pictograms Unit 1.6 Animated Story Books Unit 1.8 Spreadsheets Understanding and creating spreadsheets Tools -2Quiz -2Code -2Count **Alternative apps on ipads see separate document (Ipad apps for the curriculum)**	**Purple Mash Online Resources** Units Unit 2.3 Spreadsheets Unit 2.4 Questioning Unit 2.6 Creating Pictures Unit 2.7 Making Music Unit 2.8 Presenting Ideas Tools – 2Investigate - 2Sequence - 2Publish **Alternative apps on ipads see separate document (Ipad apps for the curriculum)**

	yfs_arts Communication- Being imaginative https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_eyfs_communication_beingimaginative/Being%20Imaginative.pdf **Other Resources/ Equipment** Ipads, interactive whiteboards, ipods, camera, bee-bots, cd player, sound buttons (to record)		
KNOWLEDGE	-Children can select and use technology for particular purposes.	-Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	-Use technology purposefully to create, organise, store, manipulate and retrieve digital content (Across a range of programmes).
SKILLS	*Children can develop mouse control through simple activities on-screen including click-and-drag, drag-and-drop. Children can begin to use a keyboard and develop familiarity with letters, numbers, backspace (to delete), arrow keys and space bar.* *Children can use a keyboard in writing.* *Children can use an interactive whiteboard for mark-making.* *Children can explore using a combination of images, sound and text.* *Children can explore changing text size, style and colour (with appropriate simple software).* *Children can use templates to make simple labels.* *Children can print out work, using appropriate software.*	*Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash* **2Quiz** *example (sorting shapes),* **2Code** *design mode (manipulating backgrounds) or using pictogram software such as* **2Count**.	*Children demonstrate an ability to organise data using, for example, a database such as* **2Investigate** *and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data such as music compositions within* **2Sequence**. *Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos, text and sound.*

ASPECT Digital Literacy			
	EYFS	**YEAR ONE**	**YEAR TWO**
VOCAB	Technology Online Monitor Interactive whiteboard Ipad Photocopier	Internet Online Search engine Personal information Privacy	Internet Online Search engine Personal information Privacy Multimedia
RESOURCES/ EQUIPMENT	**Purple Mash Online Resources** Tools - Mini Mash -2Simple City Unit plans- Understanding the word- technology https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_eyfs_world_technology/Technology.pdf **Other Resources/ Equipment** Ipads, interactive whiteboards, ipods, camera, bee-bots, cd player, sound buttons (to record)	**Purple Mash Online Resources** Units Unit 1.1 Online Safety & Exploring Purple Mash Unit 1.9 Technology outside school Tools -2Email -2Connect **Alternative apps on ipads (Ipad apps for the curriculum)** Seesaw- teaches e-safety and how to publish appropriate	**Purple Mash Online Resources** Units Unit 2.2 Online Safety Unit 2.5 Effective Searching Tools -2Email -2Connect – 2Blog **Alternative apps on ipads (Ipad apps for the curriculum)** Seesaw- teaches e-safety and how to publish appropriate content online

		content online	
KNOWLEDGE	-Children recognise that a range of technology is used in places such as homes and schools. Children to recognise how to stay safe using technology and when to ask for help.	-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.	-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.
SKILLS	*Children can use the interactive white board like a big painting easel to explore all the painting tools and their effects.* *Children can use the drag and drop activities in Simple city to create and make your own environments on the whiteboard.* *Children can use the PC to explore using the mouse to move things around on the screen and use the keyboard to become familiar with the using the keys.* *Children can use a tablet/iPad to take their own photos for Mashcams, explore using the camera on the tablet and making their own Mashcams.* *Children to discuss,explore and understand different ways technology is used around school by teachers and outside of schools in different familiar settings- supermarkets, the doctors, the vets etc.* *Children to be aware that information can be in different forms, e.g., video, pictures and sound, as well as text.* *Children to be aware of what to do if they see something they do not like on a website, e.g., how to turn the monitor off, tell an adult, use back buttons to return to the home page.*	*Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.* *Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons.* *Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.*	*Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge, e.g.* 2Publish example template. *Children make links between technology they see around them, coding and multimedia work they do in school e.g.* animations, interactive code and programs. *Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to the Purple Mash display board. They develop an understanding of using email safely by using* 2Respond *activities on*

			Purple Mash and know ways of reporting inappropriate behaviours and content to a trusted adult.