## The Mead Infant & Nursery School – Computing Subject Progression Tracker



Computing Subject Progression Tracker								
	Nursery	Reception	Year 1	Year 2				
Computer Science Curriculum Objectives	<ul> <li>Understand and follow simple instructions (algorithms)</li> <li>Use a simple program on a computer or device</li> <li>Begin to operate simple equipment e.g., CD player, remote control toys</li> </ul>	<ul> <li>Can understand and follow instructions and begin to write own instructions (algorithms).</li> <li>Start to recognise that computers need programs to function</li> <li>Learn to use technology independently – cameras, bee-bots, chrome books</li> </ul>	<ul> <li>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>Create and debug simple programs</li> <li>Use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul> <li>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions-</li> <li>Create and debug simple programs</li> <li>Use logical reasoning to predict the behaviour of simple programs-</li> </ul>				
Computer Science Skills	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective	<ul> <li>Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective.</li> <li>Children can work out what is wrong with a simple algorithm when the steps are out of order</li> <li>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</li> </ul>	<ul> <li>Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that a computer program turns an algorithm into code that the computer can understand</li> <li>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.</li> <li>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 at the end of the program</li> </ul>	<ul> <li>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.</li> <li>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.</li> <li>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</li> </ul>				

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Information technology Curriculum	info	gin to know that ormation can be rieved on computers	•	Complete a simple program Use ICT hardware to interact with age-appropriate computer software	•	Use technology purposefully to create, organise, store, manipulate and retrieve digital content-	•	Use technology purposefully to create, organise, store, manipulate and retrieve digital content-
Information technology skills	info • To a	use a computer to find ormation observe an adult using omputer to find ormation	•	Children to: develop Mouse and Trackpad Skills use laptop touchpad type capital letters and lower case letters draw pictures on the computer make music using a computer. use a device to record myself speaking and play back the sounds. take photos using a digital device open photos that the children have taken, in Purple Mash.	•	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 2Invesitigate 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.

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Digital literacy Curriculum Objectives	•	Using technology safely and respectfully, keeping personal information private identify where to go for help and support when they have concerns Recognise common uses of information technology beyond school	•	Using technology safely and respectfully, keeping personal information private identify where to go for help and support when they have concerns Recognise common uses of information technology beyond school	•	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-
Digital Literacy Skills	•	Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons know ways of reporting inappropriate behaviours and content to a trusted adult. Children understand what is meant by technology and can identify a variety of examples both in and out of school.	•	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. know ways of reporting inappropriate behaviours and content to a trusted adult. Children understand what is meant by technology and can identify a variety of examples both in and out of school.	•	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.