# Computing Concept Progression Document – 2022 2023

| Theme | How does this look in Nursery? | How does this look in Reception? | How does this look in Year 1? | How does this look in Year 2? |
|-------|-------------------------------|--------------------------------|------------------------------|-------------------------------|
| Using digital devices | • Identifying technological devices both in and around the environment (e.g. in the classroom and around Alvaston)<br>• Performing basic tasks with a range of digital devices<br>• Operating mechanical and digital toys<br>• Using an iPad for a purpose | • Continuing to use a variety of digital devices, showing an awareness that technology is used for different purposes and selecting technology for a range of purposes<br>• Realising that digital devices and technology requires power<br>• Locating and using an iPad and its functions e.g. lock button/volume<br>• Using laptops/the computer and its simple features e.g. mouse and keyboard<br>• Using computer software to complete tasks | • Exploring programmable devices and their functions e.g. Rugged Robot<br>• Familiarising themselves with a computer keyboard and its functions<br>• Using digital devices to carry out more complex functions e.g. logging on and off and typing words and sentences on a keyboard, loading applications<br>• Understanding the application of information technological devices in the wider world e.g. pedestrian crossing | • Independently logging on and off a computer using their own password<br>• Discovering more functions of laptops/computers and iPads e.g. copy and pasting, changing text types |
| Coding/Instructional Language | • Learning basic positional language e.g. up, down, forwards and backwards | • Using technological toys and working their functions, to achieve an outcome e.g. pressing play to play music<br>• Exploring programming using BeeBots<br>• Following and giving simple instructions<br>• Giving and following 2 step instructions<br>• Building on Nursery knowledge and learning more complex positional language e.g. on, under, next to. | • Creating and recording a series of instructions (of more than one step) for someone or something and knowing the terms algorithm and coding<br>• Planning, testing, editing and debugging algorithms, both plugged and unplugged<br>• Learning the positional language 'left' and 'right' | • Creating, following and editing algorithms with more steps to follow<br>• Predicting the outcomes of algorithms |
| Data retrieval and organising | • N/A | • Learning about retrieval and how the internet and devices help us, making simple searches<br>• Taking photos, drawing and recording on devices for others to see<br>• Learning that there are lots of different ways to find out information | • Taking photos, drawing and recording on devices for others to see, with more skill and control, evaluating the quality of what has been take e.g. blurred, not capturing the full object<br>• Saving and retrieving work, with some support<br>• Understanding webpages and some of their features e.g. hyperlink, pop-ups | • Researching using a search engine and learning that the web address is an algorithm to take you to the desired store of information on the internet<br>• Printing resources, independently, that will help them and talking about the quality of the information (demonstrating an awareness that it may not always be true or accurate) |

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| | | | • Making simple graphs using basic graphing software<br>• Gaining an awareness of the internet and how it works at an age appropriate level (e.g. sending and receiving information on a worldwide platform, knowing the term world-wide web)<br>• Printing a webpage for a purpose, with some support, and understanding what is meant by research | • Learning how to use more complex features of computer programmes l e.g. PowerPoint, adding backgrounds<br>• Publishing their work online and collect and organise information in the form of a graph<br>• Saving and retrieving their work independently |
| Communicating | • Using simple technology to communicate with one another | • Discussing methods of communication | • Using word processors to present their work<br>• Learning what an email is and sending and receiving them<br>• Talking about how technology has been used in their work | • Sending emails to a friend within school<br>• Making changes to the visual layout of their works<br>• Talking about their work and how technology has helped them |
| Online Safety | • Learning basic online safety rules that include telling an adult if they see something they do not like<br>• Understanding that permission is called consent and we must get this before sharing them | • Understanding what personal information is and knowing what is safe and not safe so share on the internet | • Knowing the YAPPY rules (your name, address, password, phone number and your plans) and understanding the risk of sharing things on the internet<br>• Learning the importance of passwords and why these are important<br>• Learning that some information on the internet may not be true or accurate<br>• Taught about the importance of giving and seeking consent before information is shared on the internet | • Learning that people may act differently online and they may not be who they say they are<br>• Taught about online bullying and what to do if this occurs<br>• Learning how to conduct themselves appropriately online and the importance of making safe choices, including knowing when to take a break |