



Computing Progression Years 1- 4 at Manor Hill First School

Year 1			
Computing Science & Programming	Information Technology for Collecting and Presenting Information	Information Technology for Data Handling	Digital Literacy & Online Safety
<ul style="list-style-type: none"> Understand algorithms as instructions in everyday contexts Program floor turtles using sequences of instructions to implement an algorithm Implement algorithms as unplugged and physical computing activities Evaluate algorithms and route-based programs to improve outcomes 	<ul style="list-style-type: none"> Create and save digital artwork Add and type text Use digital artwork and text to present information 	<ul style="list-style-type: none"> Create charts and pictograms Interpret data from these charts 	<ul style="list-style-type: none"> Recognise that people online can affect your emotions and know when and how to speak to a trusted adult if something or someone is upsetting Use adult support to communicate considerately online and know when to ask adults for permission Describe how to behave online and give examples Recognise that information online can be copied Give examples of how to find information Know how to keep themselves safe online Explain what passwords are and what they are used for, and describe other examples of personal information Save electronic work under a suitable name or title and explain how it belongs to themselves



Year 2

Computing Science & Programming	Information Technology for Collecting and Presenting Information	Information Technology for Data Handling	Digital Literacy & Online Safety
<ul style="list-style-type: none"> • Understand sequences as the logical structure of algorithms or programs • Predict and investigate route-based programs • Modify and create own route-based programs 	<ul style="list-style-type: none"> • Create and save digital artwork • Search for and save online images • Use a mixture of digital artwork, images, text to present information 	<ul style="list-style-type: none"> • Develop a better understanding of interpreting data from charts • Gather opinions and present findings in own chart 	<ul style="list-style-type: none"> • Explain how other people may look/act different online, and how communicating with unknown people might be risky • Give examples of what online bullying is, how it makes others feel and who to ask for help • Explain why you can say 'no' to sharing your information online, or who to ask permission to if you want to share • Explain how information put online can last a long time and can be seen by others • Use a search engine by typing keywords or voice activated searching, and explain what is real or fake • Describe how to use technology in different environments • Explain how to keep information private, including how passwords work • Understand that content online belongs to others



Year 3

Computing Science & Programming	Information Technology for Collecting and Presenting Information	Information Technology for Data Handling	Digital Literacy & Online Safety
<ul style="list-style-type: none"> • Debug sequences of algorithms • Use debugging skills within unplugged and physical computing activities • Write sequences of code to complete challenges, including use of repetition 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Understand what a database is and how they are used outside of school • Use a branching database to identify answers to questions • Create and use a branching database, using questions to identify objects/people 	<ul style="list-style-type: none"> • Explain what 'identity' means and how people can represent their identity differently online • Understand that people get together online with similar interests and how this is different to knowing someone offline • Describe appropriate ways to behave online, how bullying can appear and how to get support • Explain how the internet can be used to search and sell, along with using auto-correct • Explain the difference between an opinion and a fact, and how opinions may not be shared by others • Explain why some online activities have age restrictions and why it is important to follow them • Describe simple strategies for creating and keeping passwords private, and who to speak to if pressured to share them • Explain why other's work online should not be copied



Year 4

Computing Science & Programming	Information Technology for Collecting and Presenting Information	Information Technology for Data Handling	Digital Literacy & Online Safety
<ul style="list-style-type: none"> Extend code writing skills to use various inputs and outputs, including 'broadcasting' Reinforce sequence, repetition and selection skills when implementing conditional statements, e.g. "If... Then..." Understand what a computer is made up of, how the components work together and provide access to how technology is used today 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Create a database, considering audience and purpose Use the 'sort' and 'search' functions to interrogate data within a database 	<ul style="list-style-type: none"> Explain how my online identity may differ from it offline, and why others might do this too Describe strategies for safe, fun online social environments and give examples of how to be respectful whilst recognising healthy and unhealthy online behaviour Describe how to find information about others online and explain ways that it could be copied or shared Describe ways people can be bullied online and recognise when someone is upset, hurt or angry Explain how to search for information within a range of technologies and describe some of the methods used to encourage people to buy items online Explain how technology can be a distraction positively and negatively, but also identify when this time needs to be limited Describe strategies for keeping information private but explain the internet is never fully private and is monitored Search the internet for content to use that permission is given for and give examples of content that does not