

HIPPINGS METHODIST PRIMARY COMPUTING PROGRESSION OF SKILLS LKS2



COMPUTING SKILLS	Year 3	Year 4
Computer Science Hardware Networks and Data Representation	<ul style="list-style-type: none"> ✓ Understanding what the different components of a computer do and how they work together ✓ Drawing comparisons across different types of computers ✓ Learning what a server does ✓ Learning what a network is and its purpose ✓ Identifying the key components within a network, including whether they are wired or wireless ✓ Recognising links between networks and the internet ✓ Learning how data is transferred 	<ul style="list-style-type: none"> ✓ Learning about the purpose of routers ✓ Consolidating understanding of the key components of a network ✓ Understanding that websites & videos are files that are shared from one computer to another ✓ Learning about the role of packets ✓ Understanding that computer networks provide multiple services, such as the World Wide Web, and opportunities for communication and collaboration
Computer Science Computational Thinking	<ul style="list-style-type: none"> ✓ Using decomposition to explain the parts of a laptop computer ✓ Using decomposition to explore the code behind an animation ✓ Using repetition in programs ✓ Understanding that computers follow instructions ✓ Using an algorithm to explain the roles of different parts of a computer ✓ Using logical reasoning to explain how simple algorithms work ✓ Explaining the purpose of an algorithm ✓ Forming algorithms independently 	<ul style="list-style-type: none"> ✓ Solving unplugged problems by decomposing them into smaller parts ✓ Using decomposition to understand the purpose of a script of code ✓ Using decomposition to help solve problems ✓ Identifying patterns through unplugged activities ✓ Using past experiences to help solve new problems ✓ Using abstraction to identify the important parts when completing both plugged and unplugged activities ✓ Creating algorithms for a specific purpose.
Computer Science Programming	<ul style="list-style-type: none"> ✓ Using logical thinking to explore more complex software; predicting, testing and explaining what it does ✓ Incorporating loops to make code more efficient ✓ Remixing existing code ✓ Using a more systematic approach to debugging code, justifying what is wrong and how it can be corrected 	<ul style="list-style-type: none"> ✓ Understanding that websites can be altered by exploring the code beneath the site ✓ Coding a simple game ✓ Using abstraction and pattern recognition to modify code

Information Technology Using software	<ul style="list-style-type: none"> ✓ Taking photographs and recording video to tell a story. ✓ Using software to edit and enhance their video adding music, sounds and text on screen with transitions 	<ul style="list-style-type: none"> ✓ Building a web page and creating content for it ✓ Designing and creating a webpage for a given purpose ✓ Use Google online software for documents, presentations, forms and spreadsheets. ✓ Work collaboratively with others
Information Technology Using Email and Internet	<ul style="list-style-type: none"> ✓ Learning to log in and out of an email account ✓ Writing an email including a subject, 'to' and 'from' ✓ Sending an email with an attachment ✓ Replying to an email 	
Information Technology Using Data	<ul style="list-style-type: none"> ✓ Understanding the vocabulary associated with databases: field, record, data ✓ Learning about the pros and cons of digital versus paper databases ✓ Sorting and filtering databases to easily retrieve information ✓ Creating and interpreting charts and graphs to understand data 	<ul style="list-style-type: none"> ✓ Understanding that data is used to forecast weather. Recording data in a spreadsheet independently. Sorting data in a spreadsheet to compare using the 'sort by...' option. ✓ Designing a device which gathers and records sensor data.
Information Technology Wider use of Technology	<ul style="list-style-type: none"> ✓ Understanding the purpose of emails. ✓ Recognising how social media platforms are used to interact. 	<ul style="list-style-type: none"> ✓ Understanding that software can be used collaboratively online to work as a team.
Digital Literacy	<ul style="list-style-type: none"> ✓ Recognising that different information is shared online including facts, beliefs and opinions. Learning how to identify reliable information when searching online. ✓ Learning how to stay safe on social media. Considering the impact technology can have on mood. Learning about cyberbullying. ✓ Learning that not all emails are genuine, recognising when an email might be fake and what to do about it. 	<ul style="list-style-type: none"> ✓ Recognising that information on the internet might not be true or correct and that some sources are more trustworthy than others. ✓ Learning to make judgements about the accuracy of online searches. ✓ Identifying forms of advertising online. ✓ Recognising what appropriate behaviour is when collaborating with others online. Reflecting on the positives and negatives of time spent online. ✓ Identifying respectful and disrespectful online behaviour.