

St. Margaret's C.E. Junior School Progression of Knowledge & Skills in Computing

	Year 3 Concepts	Year 4 Concepts
Computer Systems & Networks	<p>Connecting computers</p> <ul style="list-style-type: none"> Know that digital devices have inputs, processes, and outputs Know that devices can be connected to make networks Know the physical components of a network 	<p>The internet</p> <ul style="list-style-type: none"> Know how networks connect to other networks Know how websites can be shared as part of the WWW Evaluate the consequences of unreliable content
Programming	<p>Space Rescue</p> <ul style="list-style-type: none"> Write a simple program Use logical thinking to solve problems Know computers need precise instructions Know computers can do nothing unless a program is run <p>What is an algorithm?</p> <ul style="list-style-type: none"> Design an algorithm Break a simple everyday algorithm into parts Know what algorithms are <p>Smoking Car Game</p> <ul style="list-style-type: none"> Decompose algorithms/games on and off screen Use sequence and repetition Use a keyboard to control a game Repeat x times loops Know a simple sequence of code 	<p>Slug Trail</p> <ul style="list-style-type: none"> Use simple forever loops Use simple colour conditional operator Know how loops improve programs <p>Maths Quiz</p> <ul style="list-style-type: none"> Use 'if else' selection Use sequence, selection, and repetition in programs; work with variables Solve problems by decomposing them into smaller parts Using a simple variable to record a score
Creating Media	<p>Presentation Media</p> <ul style="list-style-type: none"> Create a presentation in PPT using animations and transitions Identify, collect and manipulate different types of media Make improvements based on feedback Place your slideshow into and out of presentation mode and reorder slides Add a sound file to a slide as an object <p>Web Research</p> <ul style="list-style-type: none"> Know how to use key phrases in search engines to gather accurate information online Know what autocomplete is and how to choose the best suggestion. Know and understand the order of search results Add websites to favourites/bookmarks/folders Access and retrieve information using a search engine and save and import images Make informed choices about the appropriateness of digital content 	<p>Photo Editing</p> <ul style="list-style-type: none"> Explain that digital images can be changed Know the impact that editing can have on an image. Use editing appropriately for different scenarios, Create and evaluate 'fake' images
Online Safety	<p>SMART Rules</p> <ul style="list-style-type: none"> Know and understand the SMART rules <p>Web Research</p> <ul style="list-style-type: none"> Know that not all internet 'content' is free to use Know what auto-complete is Know that auto-complete is not always truthful 	<ul style="list-style-type: none"> Create safe passwords and remember to keep them safe. Pupils can identify a range of potential online risks Can explain SMART rules and how they should be used Know how to seek support for reporting concerns Know SMART rules Know the importance of secure passwords Know how monitoring services are used to keep children and users safe online