

Computer Science Long Term Plan Year 8 2021-22

Temperance Term

Area of Study	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	HALF TERM
Core Learning	Recap	How Computers Work						
Opportunities for Challenge	<p>Objectives: Understand drives and cloud storage Organise files in folders</p> <p>Content: File management</p>	<p>Objectives: Recall the main parts of a computer system Describe the function of the main components</p> <p>Content: Input, output and storage devices Internal components of a computer</p>	<p>Objectives: Describe data representation in a computer Convert between binary and denary numbers</p> <p>Content: Binary representation (8- bit) Representing text</p>	<p>Objectives: Describe some common network topologies Compare common network topologies</p> <p>Content: Computer networks (topologies) Peer Review / Improvements</p>				
Assessment		Less common devices Utility software	Adding binary numbers together Compare ASCII with Unicode	Client-Server, Peer-peer networks				
Area of Study		Questioning / Task completion	Questioning / Task completion	Socratic Test				

W/C	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	CHRISTMAS
Area of Study	Small Basic Project – Lemonade Stand or Lunar Lander						
Core Learning	<p>Objectives: Decompose problems Recall and use commands</p> <p>Content: Variables, constants and assignment Input and output Calculations</p>	<p>Objectives: Work methodically Use and apply programming techniques</p> <p>Content: Selection (making decisions) Iteration (repeating instructions)</p>	<p>Objectives: Identify and resolve errors Evaluate solutions</p> <p>Content: Subprograms Peer Review</p>				
Opportunities for Challenge	BIDMAS Modulo operator	Multiple conditions (including AND OR) Conditional and nested loops	Parameters / arguments				
Assessment	Questioning / Task completion	Questioning / Task completion	Socratic Test				