



Subject		Year	Term
Computer Science		10 and 11	Constant
<b>Topic</b>			
Producing Robust Programs			
<b>Content - Intent</b>			
<b>Prior Learning (Topic):</b> Key Stage 3 National Curriculum			
<p>The understanding of the issues a programmer should consider to ensure that a program meets the needs of a set task and is able to deal with issues that occur. Pupils will create code that is able to be maintained and allows for validations</p> <p>The purpose of testing code and using suitable test data. Being able to identify syntax and logic errors and the differences between them.</p>			
<b>Future Learning:</b> Networks, Programming, Algorithms			
<b>What Knowledge and Skills will be Taught (Implementation)</b>		<b>How will your understanding be assessed and recorded (Impact)</b>	
Input validation and how to add this to programs. Being able to maintain a program through the use of Sub Programs, Naming Conventions, Indentation and Commenting.		A series of problems from past exam papers, attempted in class and marked in class using peer assessment. Coding questions and solutions.	
How to test data using different forms of testing such as Iterative and Final Testing. Selecting suitable test data from Normal, Boundary and Invalid/Erroneous for a given scenario. Being able to produce and complete a test plan.		A series of problems from past exam papers, attempted in class and marked in class using peer assessment. Coding questions and solutions.	
<b>How can parents help at home?</b>			
Parents can help by ensuring revision and homework is completed.			
<b>Helpful further reading and discussion (Including reading and Vocabulary List)</b>			
<b>Reading</b> CGP Computer Science revision book GCSE pod Smart Revise Computer Science UK Teach ICT ISAAC Computing YouTube – Craig ‘n’ Dave	<b>Vocabulary List</b> Defensive Design Input Validation Maintainability Indentations Commenting Testing Iterative Testing	Final/Terminal Testing Syntax logic errors Test Data Normal Boundary Invalid/Erroneous	