

COMPUTING YEAR PLANNER (LTP) – YEAR 9

Term	Module Title	Learning Content / Skills	Assessment Schedule*	Home Learning Support
Autumn 1- Autumn 2	Photoshop / graphics	<p>This is a practical unit where students will learn about image manipulation through the use of photoshop. Students will learn about the importance of using layers and how it can be used to create effects but also edit the images. They will learn to use key tools and apply them appropriately to create a professional product for example a spot the difference image. The students will then be given a murder mystery scenario where they will need to design and produce a professional poster for using the tools they have learned in Photoshop so far.</p> <p>Key skills: Creativity Problem solving Short cut keys Application of tools Effective use of layers</p>	<p>Formative – Assessment of classroom work and homework tasks will be at least once every two weeks. These tasks will be marked on the 0-9 grading system using the unit mark sheets.</p> <p>Reflection time will be given to students to work on their targets which will allow for an improvements in their grades on work which has already been marked.</p> <p>An overall summative assessment will take place at the end of the module (end of term). This will be graded 0-9 using the unit mark sheets.</p>	<p>Think about where image manipulation might have been used on items in your house. For example, magazine, photos, posters. What kind of tools have been used to manipulate the image?</p> <p>How do you think the manipulation of celebrity images has impacted our society today?</p>
Autumn 2 – Spring 1	Python Next Steps	<p>This unit is to build on the skills from Python in year 8. Students will learn how to use for loops and compare their use with while loops, before moving on to arrays (lists), which are introduced as a new data structure and are used in conjunction with for loops. Procedures and functions with parameters are</p>	<p>Formative – Assessment of classroom work and homework tasks will be at least once every two weeks. These tasks will be marked on the 0-9 grading system using the unit mark sheets.</p>	<p>Try writing algorithms for everyday processes you might do in the house. E.g. Going to bed, making a cup of tea, boiling and egg.</p>

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		<p>covered to help pupils understand the concept and benefits of modular programming. This unit is designed to take pupils right up to a point where a GCSE in Computing can pick up from and should provide ample experience of programming in order to confirm any decision to pursue Computing as a GCSE option.</p> <p>Key Skills: Algorithms Logical reasoning Computational thinking Appropriate use of data structures</p>	<p>Reflection time will be given to students to work on their targets which will allow for an improvements in their grades on work which has already been marked.</p> <p>An overall summative assessment will take place at the end of the module (end of term). This will be graded 0-9 using the unit mark sheets.</p>	<p>Try writing a pseudocode for a program which allows someone to enter a temperate and the program outputs if it is too hot or too cold.</p> <p>Think of 3 things in the house which might use a variable and identify what it might be?</p>
Spring 1 – Spring 2	Programming with Game Maker	<p>This is a practical unit where students will be introduced to GameMaker and object orientated programming. They will plan and develop their own games, learning to incorporate variables, events and actions, and making use of object-orientated programming techniques. Finally they will learn to test and debug their programs. By the end of this unit pupils should be able to:</p> <ul style="list-style-type: none"> • relate computational abstractions and simple programming code to on-screen actions • design simple algorithms to solve problems • sequence instructions in order to make things happen 	<p>Formative – Assessment of classroom work and homework tasks will be at least once every two weeks. These tasks will be marked on the 0-9 grading system using the unit mark sheets.</p> <p>Reflection time will be given to students to work on their targets which will allow for an improvements in their grades on work which has already been marked.</p> <p>An overall summative assessment</p>	<p>If you play video games at home think about what the purpose and target audience for the game is?</p> <p>Can you identify 10 objects that have been used in the game?</p> <p>Research 5 tips on what makes a good computer game.</p>

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Summer 1 & 2	Computing Theory	<p>This is a theoretical unit covering the basic principles of computer architecture and use of binary. Pupils will revise some of the theory on input and output covered in previous learning and continue to look at the Input-Process-Output sequence and the Fetch-Decode-Execute cycle through practical activities. Pupils will then look at some simple binary to decimal conversion and vice versa, and learn how text characters are represented using the ASCII code. This will be followed by some simple binary addition.</p>	<p>Formative – Assessment of classroom work and homework tasks will be at least once every two weeks. These tasks will be marked on the 0-9 grading system using the unit mark sheets.</p> <p>Reflection time will be given to students to work on their targets which will allow for an</p>	<p>Research the role of the processor. How many items in your house has a processor?</p> <p>Can you list 3 different hardware and software used in your house?</p> <p>Can you name the different</p>

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