



IT COMP Y9 CURRICULUM AND ASSESSMENT MILESTONES DOCUMENT

YEAR 9 CURRICULUM MILESTONES: IT COMP

Topic 1 - Advanced Python Text Based Programming		
Learning Aim		
Use the print function to be able to output code		
Describe what a syntax error is and identify errors in a piece of code		
Identify the types of data used in a program		
Use casting to create programs in Python		
Explain what is meant by the term 'Conditional formatting		
Use IF, ELIF and ELSE functions in a program		
Use While and For loops in a program		
Topic 2 – Analysing Data		
Learning Aim		
Describe the terms pattern recognition and abstraction		
Import data from an external source into Microsoft Excel		
Identify the characteristics of good quality data		
Create a number of Pivot tables in Microsoft Excel to summarise data		
Create charts and graphs to visually represent data		
Create a data dashboard to help analyse data		

Topic 3 – BITE Basics (New Unit)		
Learning Aim		
Describe how businesses differentiate their products from their rivals		
Explain what market segmentation is and how it is used to target different customers		
Describe what is meant by the term franchising and give real business examples		
Explain the strategies that businesses can use to price their products		
Explain with examples how businesses can advertise their products		
Topic 4 – Computing Impacts		
Learning Aim		
Explain the health, social and wellbeing issues related with computers		
Describe how businesses use computers on a day to day basis		
Explain what is meant by the term ethics		
Identify and describe the main computing laws		
Explain the environmental impacts of computing		
Explain what is meant by Artificial Intelligence		
Topic 5 – Safe Online Working		
Learning Aim		
Explain the difference between a fixed and a ad-hoc network		
Describe what cloud storage and cloud computing are and how they are used by businesses		
Explain what collaboration tools how and how they are used by businesses		
Explain how data is used over the internet and how to keep it safe		
Explain the main threats to data such as viruses		
Topic 6 – User Interface Design Theory		
Learning Aim		
Explain with examples what a User Interface is		
Describe the difference between UX and UI		
Explain the main design principles		
Outline the project planning process		
Design and create a user interface for given task		

YEAR 9 ASSESSMENT MILESTONES: IT COMP

Topic 1 & 2: Advanced Python Programming and Managing Data	<p>Pupils will complete a diagnostic test.</p> <p>Pupils should demonstrate knowledge of the following for Python: a recognition of an understanding of the term's: variable, algorithm, sequencing, iteration and debugging.</p> <p>Pupils should demonstrate knowledge of the following for Spreadsheets (Managing Data) : What spreadsheets are commonly used for, what the difference between formulas and functions are and how data can be represented. They will also be given verbal feedback during the lessons.</p>
Topic 3 & 4: BITE Basics and Computing Impacts	<p>Pupils will complete an end of topic diagnostic test which covers both topics.</p> <p>Pupils should demonstrate knowledge of the following for BITE Basics: What the function of the marketing department is, how businesses use the 4Ps (product, price, promotion and place)</p> <p>Pupils should demonstrate knowledge of the following for Computing Impacts: What the social, ethical and medical impacts of the increased use of IT are, the main environmental impacts of IT and the three main computing laws</p>
Topic 5 & 6: Safe Online Working and User Interface Design Theory	<p>Pupils will complete an end of topic diagnostic test which covers both topics.</p> <p>Pupils should demonstrate knowledge of the following for Safe Online Working: How modern technologies have impacted working practices, how people can work collaboratively with each other and how to keep data safe</p> <p>Pupils should demonstrate knowledge of the following for User Interface Design Theory: The different types of user interface, how user interfaces can be made to suit people with different accessibility needs, how the design process works. There will also be a practical assessment of their user interfaces.</p>