Computing

Year 7

What are the aims and intentions of this curriculum?

Students cover basic Computing aspects such as the components, storage and binary representation. Students then cover the topic of e-safety so students are aware how to stay safe in the digital world. Students are then taught to design and create an interactive product to demonstrate the ability the create products using industry standard software. Students then study a unit of Kodu to introduce programming concepts.

Term	Topics	Knowledge covered	Skills developed	Assessment
Autumn 1	Parts of a Computer Units of storage BInary representation Algorithms The World Wide Web	Parts that make up a computer, different sizes of storage on a computer, what binary is and how it is used, introducing algorithms and why they are used, what is the world wide web?	Be able to identify the components of a computer. Understand the different units of storage and where they are used. Be able to write an algorithm to solve a problem. What is the world wide web? Why is it used.	Work in booklets
Autumn 2	E-safety E-safety situations E-safety movie	What is e-safety, how do you stay safe online, be able to offer advice in particular situations, be able to use ICT to develop e-safety advice.	Be able to use their knowledge of e-safety to give advice in situations. Be able to use ICT skills to create an e-safety movie offering advice to students their age on how to stay safe.	Work in booklets E-safety movie Written assessment on all work so far
Spring 1	Product reviews Interactive product planning Create interactive product	Students are to review current interactive products, students are to design their own interactive product for a scenario, students are to create their own interactive product	Be able to review current products. Be able to design their own interactive product. Be able to create their own interactive product using industry standard software.	Work in booklets Interactive product
Spring 2	Create interactive product Design log Test interactive product Evaluate interactive product	Understand how to make their own interactive products. Complete a design log to show how they made their product. Test their own product to make sure it works correctly. Know how to evaluate a product they have made.	Be able to create their own interactive product using industry standard software. Be able to demonstrate how they made their own product. Understand how to test their own product to meet a client need. Be able to evaluate their own product.	Work in booklets Interactive product Written assessment on work so far
Summer 1	Introduction to programming Kodu introduction Basic programming concepts using Kodu	Basic programming concepts. Using Kodu game lab. Be able to programme using kodu game lab.	Be able to understand basic programming concepts and demonstrate these using Kodu game lab.	Kodu game lab
Summer 2	Design own game Create own game Test own game Evaluate own game	Students are to design their own game. Students are to create their own game which they have designed. Students are to test the game they have made. Students are to evaluate their own game.	Understand how to design their own game and are able to create it using Kodu game lab using programming skills. Students understand how they test their own game and show evidence of the testing. Students are to evaluate their own game to ensure it is fit for purpose.	Design work Kodu game Evaluation Written assessment on programing in Kodu