



Computing: Year 7

Scheme of Learning	Assessments
Half Term One: Safe Use of ICT This unit will look at basic safety in the Computing classroom, laws and legislation that affect the use of technology, a basic overview of what networks and the internet are and cyber security. Key concepts: CS A04: Understand the components that make up digital systems, and how they communicate with one another and with other systems. CS A05: Understand the impacts of digital technology to the individual and the wider society. The Overarching Inquiry: How has social networking affected your personal safety?	Assessment One: Create a poster to tell people what to do if they are being cyberbullied. Criteria: include a definition of cyberbullying, examples of help, source any information (A05) Assessment Two: End of unit quiz to show understanding of e- safety, cyber security, laws and basic networks (A04, A05)
Half Term Two: Computational Thinking This unit will develop pupil's thinking skills by looking at how to break problems down logically. Pupils will be given a number of different problems to solve that require them to break down the problem and think of the steps they need to take to be successful. Key concepts: CS A01: Understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms and data representation. CS A02: Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs.	Assessment One: Pupils will take part in a competition called the UK BEBRAS computational thinking challenge. Marks for the competition are fed back at a later date (A01, A02, A03, A04) Assessment Two: Create a review of 3 different computational thinking tasks, explaining what the problem is and how to solve the problem (A01, A02, A03, A04)

CS AO3: Think creatively, innovatively, analytically, logically and critically. CS AO6: Apply Mathematical skills relevant to Computer Science. The Overarching Inquiry: How do we solve problems by breaking them in to small chunks?	
Half Term Three: Using Computers This unit will discuss what computer systems actually are, input and output devices, components including the CPU, software such as the operating system and will introduce binary code. Key concepts: CS AO4: Presentation identifying and explaining different computer hardware CS AO6: Apply Mathematical skills relevant to Computer Science. The Overarching Inquiry: What is a computer system?	Assessment One: Presentation identifying and explaining different computer hardware (AO4) Asses sment Two: End of Unit Quizizz test covering input/output devices, systems, basics of the CPU, search engines (AO4) and Binary (AO6)
Half Term Four: Sequencing This unit will introduce programming concepts and techniques such as using event handling, variables and loops by using Micro:bit block editor to create a variety of simple programs. Key concepts: CS AO1: Understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms and data representation. CS AO2: Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs.	Assessment One: Mid-Unit Quizizz test covering basic sequencing techniques and use of appropriate terminology (AO1) Assessment Two Create annotated screenshot evidence of a program in Micro:bit block editor, using sequencing techniques such as loops and selection, accompanied by testing and evaluation of the program (AO2, AO3, AO6)

CS AO3: Think creatively, innovatively, analytically, logically and critically. CS AO6: Apply Mathematical skills relevant to Computer Science. The Overarching Inquiry: Are programs really just like recipes?	
Half Term Five: Graphics This unit will teach pupils to use a variety of image editing techniques to create a planner cover design. ICT AO6: Use techniques efficiently to source, select and store appropriate assets effectively, in a wide variety of contexts. ICT AO7: Create solutions which demonstrate detailed consideration of target audience and for a specific brief. The Overarching Inquiry: What makes a great planner cover design?	Assessment One: Quizizz test covering appropriate use of graphics editing software tools (AO7) vector / bitmap images and suitable use of images (AO6) Assessment Two : Create a planner cover design for the school planner, demonstrating appropriate editing techniques, accompanied by an evaluation of the product (AO7)
Half Term Six: Extended Project This unit will discuss a specific piece of modern technology to look at the affect it has on society. In this case we will be looking at games technology and will be looking to develop an understanding of ethical and cultural issues that surround this technology. CS A04: Understand the components that make up digital systems, and how they communicate with one another and with other systems. CS A05: Understand the impacts of digital technology to the individual and the wider society. The Overarching Inquiry: Do computer games have a positive or negative affect on us?	Assessment One: Quizizz test covering ethics and cultural issues in gaming (AO4, AO5) Assessment Two: Create a presentation that gives a balanced argument for and against the use of computer games technology (AO4, AO5)