Subject: ICT & Computing		Year Group: 7
Term 1 Key Focus/Topic(s): **Networking – E-Safety, Using computers (folders etc.) and the Internet** 1. School System 2. E-Safety 3. Internet and Web Browsers 4. Searching the Web 5. Microsoft Word (could be optional) 6. Microsoft Office 7. Assessment	Term 2 Key Focus/Topic(s) **Computers – Inputs/Outputs and Memory** 1. Types of Computer 2. Input-Process-Output Model 3. Computer Hardware 4. Memory and Secondary Storage 5. Software 6. Mobile Applications (could be optional) 7. Assessment	Term 3 Key Focus/Topic(s) **Data Representation - Excel (Database introduction)** 1. How to use Excel 2. Summarising Data 3. Charting (could be optional) 4. Introduction to databases 5. Validation, Searching and Sorting 6. Assessment
Term 1 Assessment Opportunities • Self, peer, teacher and end of unit assessment.	Term 2 Assessment Opportunities: • Self, peer, teacher and end of unit assessment.	Term 3 Assessment Opportunities: • Self, peer, teacher and end of unit assessment.
Term 4 Key Focus/Topic(s): **IT Graphic Design and Copyright** 1. Copyright and magazine covers' 2. Using Fireworks to create a wireframe. 3. Using Photoshop to adapt an image. 4. Continuing with design (could be optional) 5. Finalising a design and evaluating 6. Assessment	Term 5 Key Focus/Topic(s): **Computational Thinking - Algorithms and Decomposition** 1. An introduction to algorithms 2. Computational Thinking 3. Problem Decomposition and Scratch Overview 4. Starting the games 5. Continuing with game development 6. Continuing with game development (could be optional) 7. Assessment	Term 6 Key Focus/Topic(s): **Programming - Basic Programming Techniques (Scratch)** 1. Continuing with game development 2. Continuing with game development (could be optional) 3. Continuing with game development 4. Evaluation 5. Evaluation 6. Performance Review 7. Assessment
Term 4 Assessment Opportunities • Self, peer, teacher and end of unit assessment.	Term 5 Assessment Opportunities • Self, peer, teacher and end of unit assessment.	Term 6 Assessment Opportunities • Self, peer, teacher and end of unit assessment.

Rationale:
This Scheme of Work has been developed to fit in with the current National Curriculum for Computer Science, as well as preparing students for KS4 and beyond. It is designed to be taught in one lesson a week, throughout Year 7, but many topics can be readily adapted. The Scheme of Work will enable students to understand and play an active role in the digital world that surrounds them, not to be passive consumers of an opaque and mysterious technology!

Long-term overview for Year 7 ICT

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Evaluation:
The assessment framework is based on a tiered system, with students trying to 'tick off' the criteria in each box by the end of the Key Stage. The units have been designed to allow students to progress across the Key Stage. It works based on six strands of computing (Computational Thinking, Programming, Data Representation, Computers, Networking and IT), and each strand is covered in one unit of work. Students will be assessed at the end of each unit with gap analysis being carried out and the results used to evaluate students' performance and progress, with the findings being used to inform future planning.
There will be opportunities built in to allow for, self, peer and teacher assessment that will ensure that all pupils:
- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

Long-term overview for Year 7 ICT