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| **Subject: GCSE ICT: Creative iMedia OCR Cambridge Nationals** | **Year Group: 9** |
| **Autumn 1 – Curriculum Plan** | **Homework Plan** |
| **R081:Preproduction Skills****LO1: Understand the purpose and content of pre-production**Introduction- Course overview1.1 Understand the purpose and uses for moodboards1.2 Create a moodboard1.3 Understand the purpose and uses for mind maps/spider diagrams1.4 Create a mind map/spider diagram1.5 Understand the purpose and uses for visualisation diagrams1.6 Create visualisation diagrams1.7 Understand the purpose and uses for storyboards1.8 Create a storyboard1.9 Understand the purpose and uses for scripts1.10 Create a script | EmbedComplete Learning Mat |
| Apply* Create a mood board for a billboard advert for a new action movie
* Create a mindmap for a given scenario
* Create a visualisation of the Homepage of a trainer’s company
* Produce all the preproduction documents needed for a new video game
 |
| Challenge/InterleavingComplete Exam Questions  |
| Improve/Go GreenBased on the feedback you have received from Exam Questions, perform the following tasks: * Do you analysis on weaknesses
* Redo questions that were not completed to gain full marks
* Write revision notes with a green pen
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| **Autumn 1 Assessment: End of Unit Assessment** |

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| **Subject: Computer Science OCR GCSE Computer Science** | **Year Group: 9** |
| **Autumn 1 – Curriculum Plan** | **Homework Plan** |
| **Theory: Computer System Architecture**1. Course Overview & What is a Computer System?
2. Components and Purpose of a Computer System
3. Explain and describe Von Neumann Architecture & Fetch Execute Cycle
4. Explain the Common Characteristics & Performance of a Computer System
5. Identify and Explain what is Embedded Systems

**Programming : Scratch**1. Introduction Flowchart planning- Planning Pacman Game - Flowcharts
2. Writing input and output statements- Programming simple Controls, Score Health Labels
3. The 3 Programming Constructs- Iteration(Loops)
4. Variables- How to create a variable to store Scores
5. Selection (Conditionals)- Win/Lose conditions
6. Evaluation of Project- Consolidation of evidence
 | Embed* Extended Writing homework with writing frame
* Watch the video below

<https://www.youtube.com/watch?v=PrSD8tpoSz0>Then study the Apollo 11 Hardware and write a report discussing how the technology has changed over the last 40-50 years. |
| ApplyProgram and produce a report on Pacman Game |
| Challenge/Interleaving* OCR MCQ on Computer Architecture
* Doodle Quiz on computer Architecture
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| Improve/Go GreenGo green on Extended writing essayBased on the feedback you have received from your Extended writing essay, rewrite the essay again  |
| **Autumn 1 Assessment: End of Unit Assessment on Computer Architecture** |

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| **Subject: GCSE Computer Science** | **Year Group: 10** |
| **Autumn 1 – Curriculum Plan** | **Homework Plan** |
| **Component 2****Theory** **2.1 Algorithms**1. Intro & Expectations-Course Overview.
2. Computational Thinking skills- Decomposition, Abstraction, pattern match, Algorithms
3. Algorithms- Introduction to Algorithms
4. Standard searching algorithms
* Binary search
* Linear search
1. Standard sorting algorithm
* Bubble sort
* Merge sort
* Insertion sort

**Programming****2.1 Algorithms**1. Algorithms-Flowcharts Symbols
2. Algorithms - Pseudocode-OCR Pseudocode Guide
3. Algorithms - Input/Output
4. Algorithms- Selection
5. Algorithms- Iteration
6. Algorithms- Arrays
7. Algorithms- Sums, Total
 | EmbedFlip classroom- create presentations on the search and sort algorithms  |
| ApplyAlgorithm Homework sheets 1-5 |
| Challenge/Interleaving* OCR MCQ assessments
* Revise Computer Architecture
* Doodle Quizzes
 |
| Improve/Go GreenBased on the feedback you have received from your OCR MCQ assessments and End of Unit assessment, perform the following tasks: * Do you analysis on weaknesses
* Redo questions that were not completed to gain full marks
* Write revision notes with a green pen
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| **Autumn 1 Assessment:**End of Unit 2.1 Assessment: |

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| **Subject: GCSE Computer Science** | **Year Group: 11** |
| **Autumn 1 – Curriculum Plan** | **Homework Plan** |
| **Programming Project 10hrs of 20****Introduction of Task 1 hour** **1. Analysis 3 hours**1.1 Problem Decomposition- High level plan -break problem into subparts- visual block diagram1.2 Requirement -Written explanation of what you have been asked to do. What does the system require? 1.3 Justification of Approaches1.4 Input-Output Diagram 1.5 Success criteria- bullet points of how you are going to solve the problem**2. Design 2 hours**2. 1 Detailed plan :• Flowchart • Pseudocode2.2 Test plan2.3 Data Structure: Variables/Lists to be used Validation of variables**3. Development and Testing 5 hours**3.1 Code of different sections-take screenshots of every error, after correction take a screenshot and explain how you solve it 3.2 Validation techniques used-take screenshot to show code used for validation3.3 Annotated code to show programmed techniques used**Theory : Component 1****1.5 Network Topologies, Protocols & Layers**1.5.1 Wifi & Ethernet1.5.2 Star and mesh topologies1.5.3 Uses of IP & MAC addressing & packet switching1.5.3 Protocols 1.5.4 Protocols & concept of layers | EmbedRevisiting programming concepts to prepare for Programming Project |
| ApplyNetwork homework booklet |
| Challenge/InterleavingOCR MCQ assessments on Networks, Network Security, Software SystemsDoodle Quizzes |
| Improve/Go GreenFeedback Sheet- Choose 3 questions based on areas you need to improved following your End of Year 10 examMake revision notes on weak topics using a green pen |
| **Autumn 1 Assessment: Interleaving Component 1 Assessment- with focus on Network and Network Security** |