



# Year 8 Computer Science

## Personalised Learning Checklist



**Name:** \_\_\_\_\_

**Band:** \_\_\_\_\_

Use this checklist before your assessment to focus your work and after to check the effectiveness of your work.

<b>G</b>	I am confident about this topic and I know what I need to do.
<b>A</b>	I am not too sure about this topic. I may need to check with my teacher and spend more time working on this topic.
<b>R</b>	I am not confident I could answer a question on this topic. I need to check with my teacher and ensure I have what I need to do it.

Unit/ Sub-Units	Topic/Unit Focus	RAG			Assessment Score & %	Grade USGE
		R	A	G		
<b>1</b>	<b>Binary</b>	R	A	G		
1.1	Recapping Binary Conversion					
1.2	Binary Addition					
1.3	Recapping Units of Measurement					
<b>2</b>	<b>Cracking the Code: Ciphers &amp; Encryption</b>	R	A	G		
2.1	Introduction to ASCII & Unicode					
2.2	History of Ciphers					
2.3	Substitution, PigPen, Railfence, Reverse and Transposition Ciphers					
2.5	Using Python to create ciphers					
<b>3</b>	<b>Networks: Architecture and principles of a network</b>	R	A	G		
3.1	The Internet and its functionality					
3.2	Different connection methods					
3.3	Network Topologies					
3.4	Types of Networks: Peer to Peer & Client Server					
3.5	Encryption Methods					
<b>4</b>	<b>Representing Sound &amp; Images</b>	R	A	G		
4.1	How are soundwaves measured?					
4.2	How are soundwaves sampled & represented?					
4.3	Lossy vs Lossless Compression					
4.4	How are images represented?					
<b>5</b>	<b>Sorting Algorithms</b>	R	A	G		
5.1	Bogo Sort Algorithm					
5.2	Bubble Sort Algorithm					
5.3	Insertion Sort Algorithm					
5.4	Merge Sort Algorithm					
<b>6</b>	<b>Artificial Intelligence</b>	R	A	G		
6.1	What is Artificial Intelligence and how is it used?					
6.2	How does Artificial intelligence work and how does it learn?					
6.3	Positives and negatives of using AI.					
6.4	Ethical and Moral issues surrounding using AI.					

**What went well (Strengths)**

Term 1	Term 2	Term 3
Term 4	Term 5	

**What could you do to improve? (Weaknesses)**

Term 1	Term 2	Term 3
Term 4	Term 5	Term 6