Personalised Learning Checklist

Subject: Computing

Year group: 9 – Term 2

Dear Student,

The list below is the learning you should will complete in term 2. Your teacher will use the list to check your progress during this time. It may be used for short quizzes, mini assessments or homework. Where there are gaps your lessons will focus on improving your knowledge and understanding.

Amber- some understanding, Green- I am confidentDescribe how digital images are composed of individual elementsREDAMBERGREENRecall that the colour of each picture element is representedREDAMBERGREENDefine key terms such as 'pixels', 'resolution', and 'colour depth'REDAMBERGREENDescribe how an image can be represented as a sequence of bitsREDAMBERGREENDescribe how colour can be represented as a sequence of bitsREDAMBERGREENDescribe how colour can be represented as a sequence of bitsREDAMBERGREENCompute the representation size of a digital image, by multiplying resolution (number of pixels) with colour depth (number of bits used to represent the colour of individual pixels)REDAMBERGREENDescribe the trade-off between representation size and perceived quality for digital imagesREDAMBERGREENPerform basic image editing tasks using appropriate software and erciting image manipulationREDAMBERGREENExplain how the manipulation digital images amounts to arithmetic operations on their digital images amounts to arithmetic operations on theirREDAMBERGREENDescribe and assess the creative benefits and ethical drawbacks of digital manipulation (Education for a Connected World)REDAMBERGREEN	Objective	My personal RA	Teacher RAG rating		
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for a Connected World)	digital manipulation (Education				
	for a Connected World)				
Recall that sound is a wave RED AMBER GREEN	Recall that sound is a wave	RED	AMBER	GREEN	
Explain the function of RED AMBER GREEN	Explain the function of	RED	AMBER	GREEN	
microphones and speakers as	microphones and speakers as				
components that capture and	components that capture and				
generate sound	generate sound				
Define key terms such as RED AMBER GREEN	Define key terms such as	RED	AMBER	GREEN	
'sample' 'sampling	'sample' 'sampling				
frequency/rate' 'sample size'	frequency/rate' 'sample size'				



Describe how sounds are	RED	AMBER	GREEN	
represented as sequences of bits				
Calculate representation size for	RED	AMBER	GREEN	
a given digital sound, given its				
attributes				
Explain how attributes such as	RED	AMBER	GREEN	
sampling frequency and sample				
size affect characteristics such as				
representation size and perceived				
quality, and the trade-offs				
involved				
Perform basic sound editing tasks	RED	AMBER	GREEN	
using appropriate software and				
combine them in order to solve				
more complex problems				
requiring sound manipulation				
Recall that bitmap images and	RED	AMBER	GREEN	
pulse code sound are not the only				
binary representations of images				
and sound available				
Define 'compression', and	RED	AMBER	GREEN	
describe why it is necessary				