



Codefez 1.2 Worksheet 1 Answers - Units, Data Storage & Compression

Q	Answer						Mark	Guidance																					
1	Megabyte	Byte	Bit	Gigabyte	Petabyte	Nibble	1																						
	4	3	1	5	6	2																							
2	1 mark for each correct answer: - RAM cannot store files long term / RAM is volatile - José needs to find out the how much secondary storage the laptop has						2																						
3	1 mark for each correct answer: - Show working – 2048 MB (2000) / 500 = 4 - Answer as 4 videos						2																						
4	Data is stored in a state of on/off // 1/0 // positive/negative charge/flow in circuits						1																						
5	<input type="checkbox"/> Lossy means the decompressed file is not identical to the original... <input type="checkbox"/> ...the difference is unlikely to be noticed by humans <input type="checkbox"/> Lossy will decrease the file size ... <input type="checkbox"/> ... so it can be sent via e-mail																												
6	0110 0001						1																						
7	- Working; shows 97 converted into binary (1100 0001) - Then 0110 converted to 6 and 0001 converted to 1 - 61						2																						
8	1 mark per nibble 1110 0111						2																						
9	<div>- 1 mark for filling in the denary column correctly.</div> <div>- 1 mark for each of the ASCII rows filled in correctly for characters d, e & f.</div> <div>- 2 marks for correctly working out the ASCII code for the character z.</div> <table><tr><th>Character</th><th>Denary</th><th>ASCII Code</th></tr><tr><td>c</td><td>99</td><td>01100011</td></tr><tr><td>d</td><td>100</td><td>01100100</td></tr><tr><td>e</td><td>101</td><td>01100101</td></tr><tr><td>f</td><td>102</td><td>01100110</td></tr><tr><td>o</td><td>111</td><td>01101111</td></tr><tr><td>z</td><td>122</td><td>01111010</td></tr></table>						Character	Denary	ASCII Code	c	99	01100011	d	100	01100100	e	101	01100101	f	102	01100110	o	111	01101111	z	122	01111010	6	
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c	99	01100011																											
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10	0000 1001						1																						
11	Each shift divides the number by 2 // the number is divided by 4						1																						