

Q	Answer	Mark	Guidance												
1	TEXT: <ul style="list-style-type: none"><li>- Use lossless compression</li><li>- ... The compression must be able to retain all characters and spacing</li><li>- ... if data is lost it would make the file unreadable</li></ul> IMAGES: <ul style="list-style-type: none"><li>- Use Lossy compression</li><li>- ... it will greatly reduce the file size without a noticeable loss in quality</li><li>-</li></ul>	4													
2	<ul style="list-style-type: none"><li>- The amplitude of the sound is measured using a mic</li><li>- ... and is converted to binary</li><li>- ... at regular intervals</li></ul>	2													
3	<ul style="list-style-type: none"><li>☐ Reduces file <b>size</b></li><li>☐ Takes less time to transmit // faster to upload // faster to download</li><li>☐ Requires less <b>storage</b> space (on the server/device)</li><li>☐ May otherwise exceed <b>email</b> storage</li><li>☐ Uses less bandwidth to transmit</li><li>☐ Uses less data to send (e.g. mobile data)</li></ul>	2													
4	10000000	1													
5	79	2	1 mark per correct number												
6	<ul style="list-style-type: none"><li>- True</li><li>- ... ASCII use 7/8 bits to store characters</li><li>- ... Unicode uses 16/32 bits to store characters</li></ul>	2													
7	<ul style="list-style-type: none"><li>- Converts 122 into binary 01111010</li><li>- Converts the binary into hexadecimal 7a</li></ul>	2													
8	<ul style="list-style-type: none"><li>- Hex numbers are easier to remember // shorter numbers</li><li>- They are able to expand the number of characters to include more alphabets characters or symbols.</li></ul>	2													
9	<table><tr><td>Hexadecimal</td><td>1</td><td>F</td><td>3</td><td>4</td><td>9</td></tr><tr><td>Binary</td><td>0001</td><td>1111</td><td>0011</td><td>0100</td><td>1001</td></tr></table>	Hexadecimal	1	F	3	4	9	Binary	0001	1111	0011	0100	1001	3	
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