

Units of Information questions

01 Binary numbers are used to represent data inside computers.

01.1 State the number of bits in a Byte

[1 mark]

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01.2 Write down the highest decimal number which can be represented using a 8 bit binary word

[1 mark]

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02 Larger units of information can be used to express the size of files stored on computers.

02.1 What does the abbreviation TB stand for?

[1 mark]

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02.2 Complete the table to show the meanings of each of the abbreviations of units of information

[4 marks]

Abbreviation	Meaning
b	
	megabyte
	kilobyte
GB	

02.3 Place the following quantities in order of size (1–4, where 1 is the smallest and 4 the largest)

[3 marks]

Quantity	Order (1 – 4)
15 bits	
1 Byte	
1 kiloByte	
1,040 Bytes	

03.1 A file has a size of 16,000 MB. What is 16,000 MB in GB? You should show your working. **[1 mark]**

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03.2 A file has a size of 16 Bytes. What is 16 Bytes in bits? You should show your working. **[1 mark]**

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03.3 A file has a size of 16 GigaBytes. What is 16 GigaBytes in kiloBytes? You should show your working. **[2 marks]**

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03.4 A file has a size of 48,000 bits. What is 48,000 bits in kiloBytes? You should show your working. **[3 marks]**

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03.5 A file has a size of 2MB. What is 2MB in bits? You should show your working. **[3 marks]**

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