**1** Computers represent different types of data in binary.

**(a)** Tick (✓) **one** box to show the reason why computers use binary to represent data.

**A** Computers only allow 1s and 0s to be entered. ☐

**B** Computers are made of switches and gates that can only be on or off. ☐

**C** Binary does **not** need to be converted into other forms of data to be displayed. ☐

**D** Both computers and humans can quickly process binary data. ☐

[1]

**(b)** One form of data is characters.

The American standard code for information interchange (ASCII) denary number for the character 'N' is 78.

**(i)** Tick (✓) **one** box to identify the ASCII denary number for the character 'Q'.

**A** 81 ☐

**B** 80 ☐

**C** 79 ☐

**D** 77 ☐

[1]

**(ii)** Give the binary number for the ASCII denary number for 'N'.

..... [1]

Working space

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**(iii)** Explain how the word 'RED' is represented using a character set.

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..... [2]

**(c)** Sound can be represented as binary.

**(i)** Explain why recording sound with a higher sampling resolution creates a more accurate recording.

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..... [2]

**(ii)** Give **one** other way that the accuracy of a sound recording can be improved.

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..... [1]