5 A musician is recording herself playing the music for a song on the piano.

(a) Explain how the analogue sound is recorded and converted to digital.

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..... [5]

(b) State **two** ways that the accuracy of the recording could be increased.

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[2]

(c) The musician compresses the sound file using lossless compression instead of lossy compression.

Explain why the musician would choose to use lossless compression instead of lossy compression.

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..... [3]

(d) The musician types the words for the song into a document.

Two character sets that can be used when converting text to digital are the American standard code for information interchange (ASCII) and Unicode.

Explain the differences between the ASCII character set and the Unicode character set.

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