# 2.6 Data Representation

# Lesson 2 - Characters

Green – Easier challenges

Orange – Medium challenges

Red – Medium challenges

1. Create a Poster on the difference between ASCII and Unicode.
2. Reference should be made to the following:
   1. Origins
   2. Give examples of where each set would be used
   3. Number of bits
3. Create your own kind of Coding System in Binary for the English Alphabet.
4. Code a message using this and send it to a friend to decode using your ‘code’.

Essay on why Extended ASCII is used.

* Students to research into the origins of 7 bit ASCII and how as technology developed there was a need to store the code in 8 bits.
* Examples of different ways the 8th bit is used could be discussed.

**OCR Resources**: *the small print*OCR’s resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board, and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources.   
© OCR 2016 - This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content: n/a

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications: [resources.feedback@ocr.org.uk](mailto:resources.feedback@ocr.org.uk)

We’d like to know your view on the resources we produce. By clicking on ‘[Like](mailto:resources.feedback@ocr.org.uk?subject=I%20like%20the%20OCR%20GCSE%20(9-1)%20Computer%20Science%20Challenges%202.6%20Data%20Representation%20L2)’ or ‘[Dislike](mailto:resources.feedback@ocr.org.uk?subject=I%20dislike%20the%20OCR%20GCSE%20(9-1)%20Computer%20Science%20Challenges%202.6%20Data%20Representation%20L2)’ you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click ‘Send’. Thank you.

If you do not currently offer this OCR qualification but would like to do so, please complete the Expression of Interest Form which can be found here: [www.ocr.org.uk/expression-of-interest](http://www.ocr.org.uk/expression-of-interest)