Do not Google answers – use the syllabus definitions where needed. The ones you get from Google are too complex and don't apply to a GCSE course properly

01 Convert the decimal number `121` into binary. Write your answer as an 8-bit binary number.

[1 mark]

……..

02 Convert the hexadecimal number `3C` into binary. Write your answer as an 8-bit binary number.

[2 marks]

……..

……..

03 Add together the following three binary numbers and give your answer in 8 bit binary

[2 marks]

```
  10110001
  00010011
+ 00100101
```

……..

……..

04 State the arithmetic effect of applying a left binary shift of three to a binary number.

[1 mark]

……..

05 Define the term **sampling resolution** in the context of representing sound digitally.

[2 marks]

……..

……..

06 Define the term **colour depth** in the context of representing images digitally.

[2 marks]

……..

……..

07 The keyboard character **&** (an ampersand) is represented in ASCII code as 038. What will its representation be in Unicode? Do not Google this – syllabus knowledge point from Unit 3.3.5

[1 mark]

……..