

# GCSE COMPUTER SCIENCE

GCSE (8520)

UNIT 3.1



## 3.1 Number bases

Content	Additional information
Understand the following number bases: <ul style="list-style-type: none"> <li>• decimal (base 10)</li> <li>• binary (base 2)</li> <li>• hexadecimal (base 16).</li> </ul>	
Understand that computers use binary to represent all data and instructions.	Students should be familiar with the idea that a bit pattern could represent different types of data including text, image, sound and integer.
Explain why hexadecimal is often used in computer science.	

### SPECIMEN MATERIAL 2015

0 1 . 3 A student's answer to the question "Why is hexadecimal often used instead of binary?" is shown in **Figure 2**.

**Figure 2**

Because it uses fewer digits it will take up less space in a computer's memory.

Explain why the student's answer is incorrect.

[2 marks]

---



---



---



---

### SPECIMEN PAPER 1 SUPPLEMENTAL MATERIAL 2015

1 (c) Give **one** reason why programmers often use hexadecimal, instead of binary, to represent numbers.

[1 mark]

.....

.....