

CompSci Unit 3 – Representation

Name the **two** things binary is used to represent in computers (3.3.1)

1.

2.

What is **hexadecimal**? Why is it used? (3.3.1)

.....

What is a **bit**? (3.3.2)

.....

What is a **byte**? (3.3.2)

.....

Put these in order of size (1 is smallest, 6 is biggest) (3.3.3)

Quantity	Abbrv.	Order (1 smallest, 6 largest)
kilobyte	kB	
megabyte	MB	
byte	B	
terabyte	TB	
bit	b	
gigabyte	GB	

What is **ASCII code** used for? (3.3.5)

.....

What is **Unicode**? How is it different to ASCII? (3.3.5)

.....

What is a **pixel**? (3.3.6)

.....

What does **colour depth** mean? (3.3.6)

.....

Write out the formula to calculate the **size** of a bitmap image (3.3.6)

.....

Write out the formula to calculate the **file size** of an image file (3.3.6)

.....

Explain how **colour depth** affects the file size of an image (3.3.6):

.....

.....

How does **sampling** work for sound files? (3.3.7)

.....

.....

.....

What do **Hertz** measure in this context? (3.3.7)

.....

Write out the formula to calculate the **file size** of a sound file (3.3.7)

.....

Explain what each part of the formula means (3.3.7):

1.

2.

3.

What does **compression** do? (3.3.8)

.....

Name the two types of **compression** you need to know about (3.3.8):

1.

2.