Year 8

Term 3 Assessment

Computing

Time limit: 45 mins

No of Questions: 23

Total Marks: 40

Questions

1) What does the term Cyber Security mean? (2 marks)

• Cybersecurity covers all the ways in which we can protect computers, networks, programs, and electronic data that make them work.
• from unintended or unauthorised access, change or destruction.
(Allow suitable alternatives)

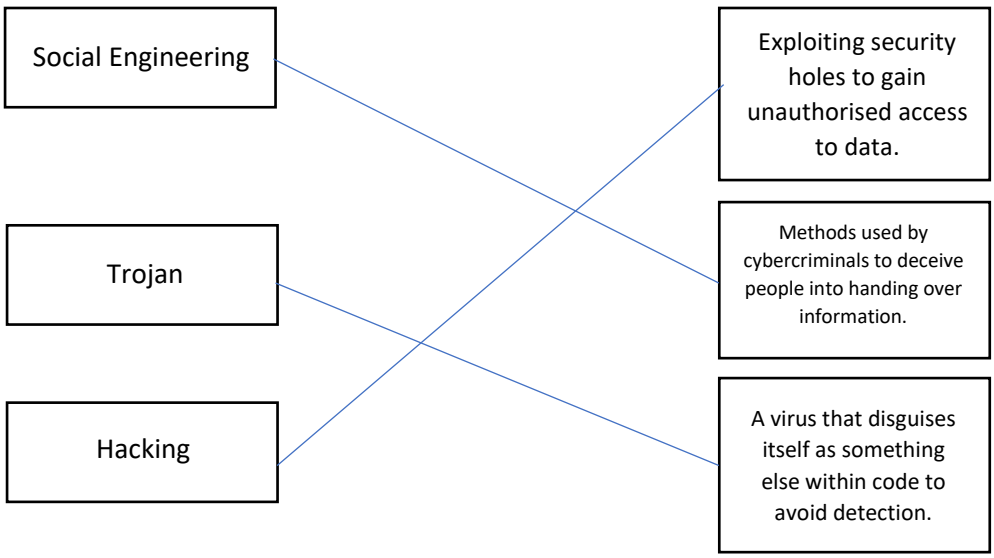
2) What information would someone be trying to gain when Shouldering? (1 mark)

• Username
• Password
• Bank Account Details
• Credit Card details
• Other sensitive information

3) Give 3 examples of personal data that hackers could find useful (3 marks)

a) Personal Details (i.e Name, Address, Contact Information)
b) Password
c) Financial Information (Bank Account, Credit Card, Other account information)

4) Match the keyword to the definition (3 marks)



5) Complete the missing words to form a definition for a DDoS Attack (3 marks)

Use the following list of words to help you complete the sentence, not all words will be used.

file	network	multiple
website	service	hacker

DDoS stands for "Distributed Denial of **service** Attack" and is when **multiple** systems flood the resources of a target system (usually a **website**) in order to cause it to crash.

6) What is the name for each unique box on a spreadsheet? Tick **ONE** (1 mark)

	A) Formula
X	B) Cell
	C) Row

Figure 1

	A	B	C	D	E
1	**Pencil**	**Cost**	**Quantity**	**Cost**	**Cost+Delivery**
2	Red	£0.30	3	£0.90	£0.90
3	Green	£0.40	8	£3.20	£3.20
4	Blue	£0.20	5	£1.00	£1.00
5	Yellow	£0.40	2	£0.80	£0.80
6	Gold	£0.99	4	£3.96	£3.96
7					
8	**Delivery**	£0.75			

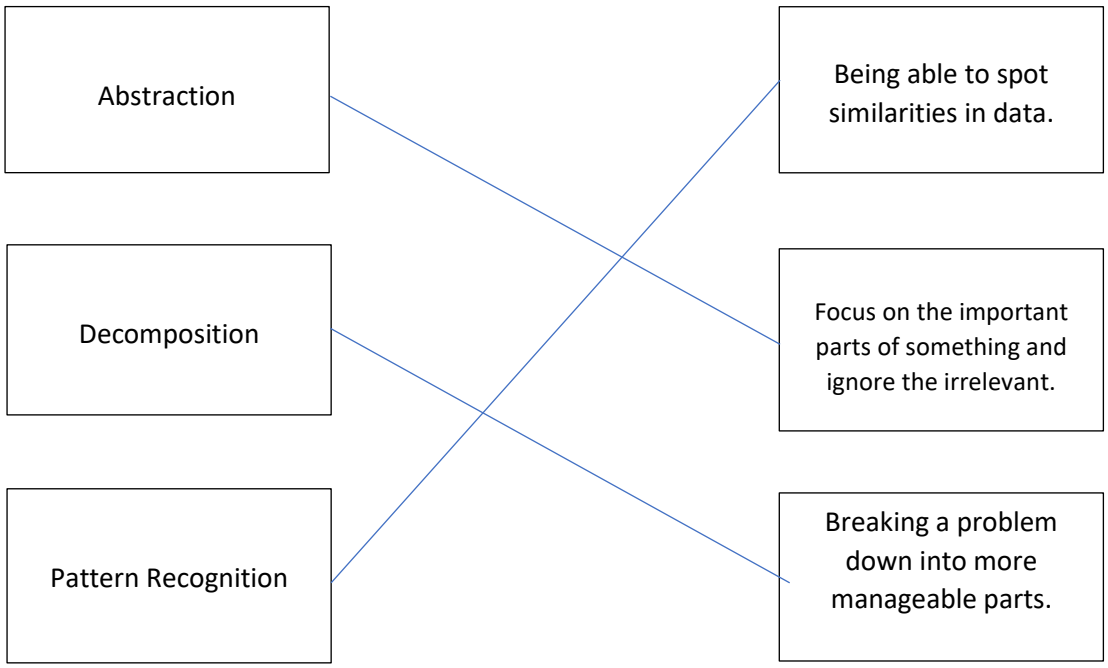
7) Write down the cell reference for the cell containing the word "Blue" in figure 1 (1 mark)

Cell Reference: _____**A4**_____

8) Write down the formula that has been used to calculate the cost in cell **D3** of figure 1 (2 marks)

Formula: **=B3*C3**

9) Match the definition to the key term (3 marks)



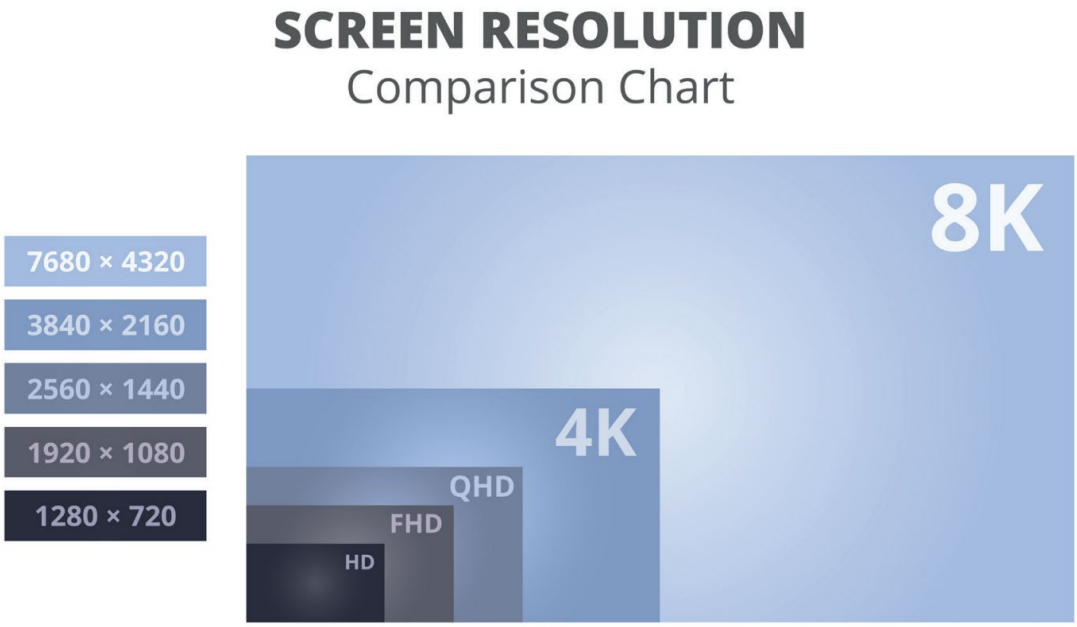
10) What is the term used to describe the smallest unit of an image that can be displayed on a screen? (1 mark)

- **Pixel**

11) What does the term Colour Depth mean? (1 mark)

- **The number of different colours available in an image**
- **The number of bits used to store each pixel**

12) Resolution is the number of pixels used in an image.



What affect would increasing the resolution of the image have?

Identify 2 changes that would occur to the image: (2 marks)

- **The quality of the image will increase.**
- **The file size of the image will increase**

13) What was the name of the Top-Secret location, where Alan Turing and other codebreakers worked during the Second World War? (1 mark)

- **Bletchley Park**

14) What was the name of the small, switch-like component, that allowed computers to become smaller and faster in the 1960's? (1 mark)

Transistor

15) Name one feature of the Apple Macintosh (1984) that other PCs from the early 1980's did not have (1 mark)

- **Mouse**
- **Graphical User Interface (GUI)**
- **Uses Icons**
- **Multiple fonts**
- **Carry Handle**

16) What type of data would you use to store a person's name in a variable? (1 mark)

- **String**

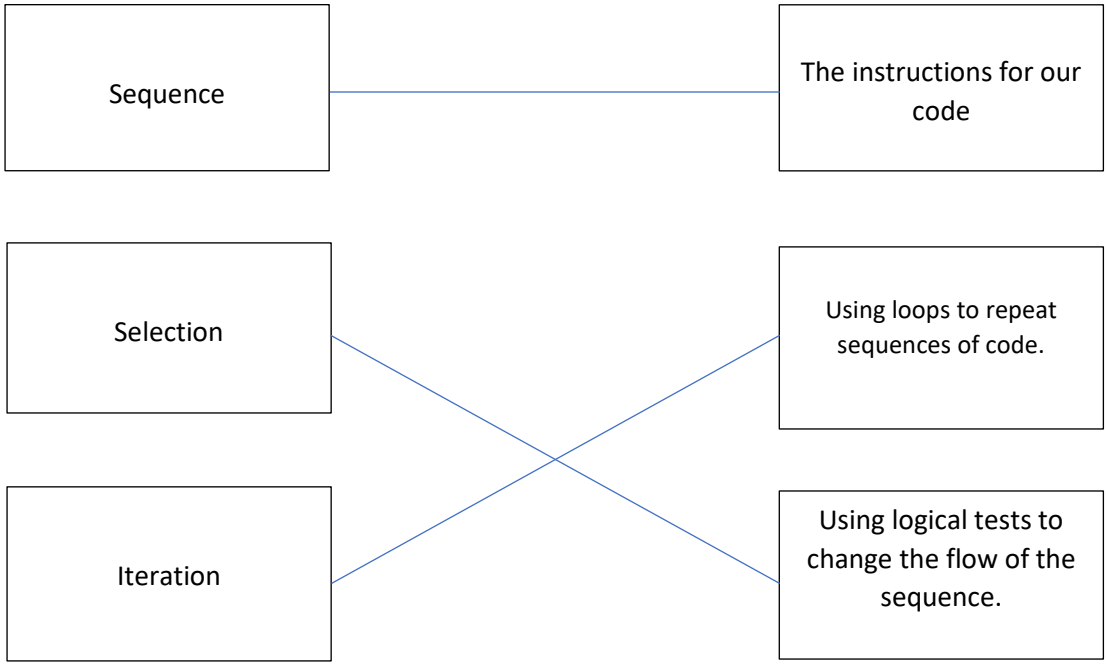
17) Write an example of an Integer (1 mark)

- **Any whole number (positive or negative)**
- **42**

18) What is a Variable? (2 marks)

- **(Named) Location in memory**
- **Used to store a value**
- **Which can change**

19) Match the term to the definition (3 marks)



20) Convert the Denary number **136** into an 8-bit Binary value (2 marks)

128	64	32	16	8	4	2	1
1	0	0	0	1	0	0	0

21) What is the largest number that can be made using an 8-bit Binary value? (1 mark)

255 (only) NOT 256

22) Complete the following 4-bit Binary Addition (2 marks)

	1	0	1	1	
	1	0	0	1	+
1	**0**	**1**	**0**	**0**	Sum
		1	**1**		Carry

- **One mark for correct Sum line (inc Overflow)**
- **One mark for correct Carry line**

23) An overflow error has occurred in the previous question. Describe what is meant by an overflow error (2 marks)

- **The value does not fit within the number of bits available.**
- **The bit is ignored.**
- **Creates inaccuracy in the answer**