

Kemnal Technology College –Computer Science Kemnal Key – Yr10 Term 1

You must be able to understand and explain the following terms: Environmental Issues & impact

Environmental Issues

The use of computers has brought about environmental, ethical and legal issues and concerns. These increasingly affect people's daily lives.



KEY - understand the benefit of using decomposition and abstraction to model aspects of the real world and analyse, understand and solve problems

Ethics of CS Technologies: New digital technologies are developed very quickly, however, they often raise serious ethical concerns to many people.

Artificial intelligence (AI) is where machines have been programmed to act in ways that are intelligent

Machine learning is where large data sets are used to 'train' a computer. Both AI and machine learning are used in facial recognition. Photos from social networks can show many different angles and poses for the same person which can then train the computer program.

KEMNAL KEY QUESTIONS

Define the following keywords:

1. Malware
2. Key logger
3. Ransomware
4. Viruses & worms
5. Trojan
6. Pharming
7. Phishing

Remember:
You will learn to write algorithms (flowcharts, pseudocode*, program code) that use sequence, selection, repetition



KEY VOCABULARY

Algorithmic bias	Machine learning may make algorithms bias towards one group of people over another
Artificial intelligence	Artificial intelligence (AI) is where machines have been programmed to act in ways that are intelligent
Unpatched software	Unpatched software leave holes open for misuse, especially since the release of a patch makes the security issues more publicly known about.
Machine learning	Machine learning is where large data sets are used to 'train' a computer
Encryption	Encryption is a way of securing data so that it cannot be read without the encryption key

Exam Question (4 marks)

- ✓ Sat Nav systems are used in cars to show a driver the streets that they are driving on.
 - Describe how abstraction is used by the designers of such devices when creating their maps.