



Part 2 - Revision

Prep for ICT Exam

E-Safety & ICT Threats

You will need to know the following:

- >To be able to define the term E-Safety
- >To be able to identify some of the dangers online
- >To be able to explain what you can do to avoid getting into danger online.

Useful Links

https://www.teach-ict.com/ks3/internet_safety/quizzes/internet_safety_quizzes.htm

http://www.teach-ict.com/gcse_new/protecting_systems/malware/quizzes_malware.html

WHAT IS E-SAFETY®

Stands for electronic safety.

The process of staying safe using electronic devices





WHAT DO WE MEAN BY THE TERM ICT THREAT®

Something that could potentially cause harm to your electronic device or files.



WHAT DO WE MEAN BY THE TERM CYBERCRIME®

Crimes which are directed at computers of other electronic devices.



ICT Threats

Term	Definition
Spam	Junk Emails
Computer Virus	A piece of malicious (nasty) code to alter the way a computer operates.
Phishing Email	An email from someone pretending to be a reputable organisation such as a bank encouraging individuals to disclose personal details such as passwords or bank details.
Hacking	The process of unauthorised access to a computer or files.
Trojan Horse	A program that seems harmless but in actual fact is malicious used to hack into a computer.
Computer Worm	A program that spreads across the internet by replicating itself on computers via their network connections.

PRACTICE QUESTIONS

>What does the term e-safety mean?

>What is the name of bullying that takes place using an electronic device?

>What is a computer worm?

>What makes a good password?

>What is the key term that means, unauthorised access to a computer or file?

>How can we prevent against a computer virus?

Networks

You will need to know the following:

- >What is a network
- >Why do we use networks
- >Network hardware
- >Topologies

Useful Link: <https://www.bbc.co.uk/bitesize/topics/zjxyrd>

https://www.teach-ict.com/gcse_new/networks/computer_networks/quizzes_computer_networks.html

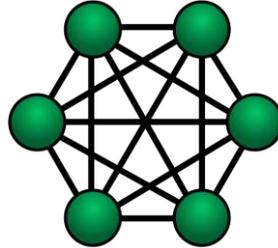
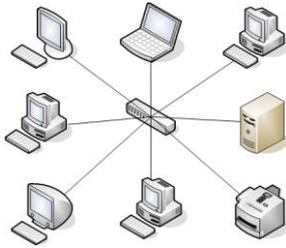
Networks

What is a network - Two or more devices connected together to share resources. A network can be wired or wireless.

WAN - Wide Area Network - A network over a large geographical area

LAN - Local area network - A network over a small geographical area, 1 site.

Topologies - The layout of devices within a network. [Click here](#) to read up more.



Network Benefits	Network Drawbacks
Resource sharing - printers	Costly to set up
Access to files	Security risks
Access to the internet	

Network Hardware

Router	<p>A router can form a <u>LAN</u> by connecting devices within a building. It also makes it possible to connect different networks together.</p> <p>Homes and businesses use a router to connect to the internet.</p>
Switch	<p>A switch performs a similar role to a hub and a bridge but is more powerful. It stores the <u>MAC addresses</u> of devices on a network and filters <u>data packets</u> to see which devices have asked for them.</p>
Network Interface Card	<p>NICs enable desktop and laptop computers to connect to a network. NICs are small circuit boards that connect to the <u>motherboard</u>.</p>
Wireless Access Point	<p>Are required to connect to a network wirelessly. WAPs are usually built into the broadband router.</p>
Transmission Media	<p>The cables</p>

PRACTICE QUESTIONS

>What is the term used to describe the layout of devices within a network

>Name 3 pieces of network hardware

>What are the advantages of being on a network

>Name 3 network topologies

>A network with no physical wires is called a..

Graphics

You will need to know the following:

>The differences between vector and bitmap images.

BITMAP VS VECTOR

WHAT ARE VECTOR IMAGES?

- Based on Mathematical Equations
- Fully Scalable
- eps, pdf, ai, svg, and wmf files
- Ra



PRACTICE QUESTIONS

>A bitmap image is made up of..

>Which type of image is most suited for a logo?

>Which type of image cannot be scaled up?

>What is the technical term for a photo that becomes blurry because it has been scaled up.