Knowledge Organiser: Computer Crime & Cyber Security
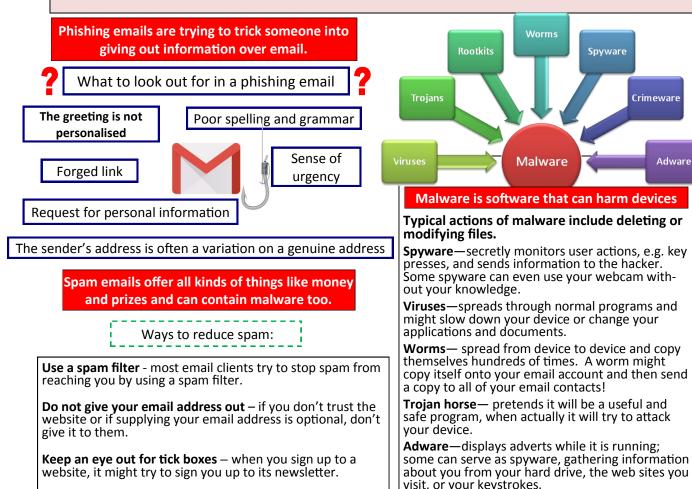
Summary

Malware is a general term that describes lots of different programs that try to do something unwanted to your computer. Malware is made to stop your device from running properly and sometimes to steal your information.

Anti-malware software is designed to find and stop malware from damaging your computer or a network. To protect your computer you need to install **anti-malware** software and run regular scans.

When you are online you need to watch out for **phishing** and **spam emails** and protect your private information. **Phishing** emails are trying to trick someone into giving out information over email. **Spam emails** can contain **malware**.

Smartphones and mobile devices allow for photos, videos and your location to be shared instantly on the internet. **Be careful what you get up to in public as anyone might have a smartphone pointed at you.** Do not post photos or videos of other people online without their permission.

Key Vocabulary

Backup	A copy of important files that is kept separately in case your original files are lost or damaged.
Chat room	Accessed on the internet, users can meet to chat in real-time, messages are typed out but voice chat rooms exist too.
Copyright	A set of rights that prevents people copying and distributing a piece of work without the copyright holder's permission.
Data	Values, typically letters or numbers.
File sharing	The act of sharing files over the internet.
Firewall	An application that prevents unauthorised connections to and from the Internet.
Hack	Gaining unauthorised access to a computer.
Information	Data that has meaning, not just a number or a letter.
Licence	A legal agreement between the company who published the software and the end user covering areas such as copyright.
Malware	Malicious software created to damage or gain illegal access to computer systems.

Phishing emails are trying to trick someone into giving out information over email.

? What to look out for in a phishing email **?**

The greeting is not personalised

Poor spelling and grammar

Forged link

Sense of urgency

Request for personal information

The sender's address is often a variation on a genuine address

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Spam emails offer all kinds of things like money and prizes and can contain malware too.

Ways to reduce spam:

Use a spam filter - most email clients try to stop spam from reaching you by using a spam filter.

Do not give your email address out – if you don't trust the website or if supplying your email address is optional, don't give it to them.

Keep an eye out for tick boxes – when you sign up to a website, it might try to sign you up to its newsletter.

Malware is software that can harm devices

Worms
Rootkits
Spyware
Trojans
Crimeware
Viruses → Malware ← Adware

Typical actions of malware include deleting or modifying files.

Spyware—secretly monitors user actions, e.g. key presses, and sends information to the hacker. Some spyware can even use your webcam without your knowledge.

Viruses—spreads through normal programs and might slow down your device or change your applications and documents.

Worms— spread from device to device and copy themselves hundreds of times. A worm might copy itself onto your email account and then send a copy to all of your email contacts!

Trojan horse— pretends it will be a useful and safe program, when actually it will try to attack your device.

Adware—displays adverts while it is running; some can serve as spyware, gathering information about you from your hard drive, the web sites you visit, or your keystrokes.

Staying safe online

Never disclose   your name   telephone number   address or school

It's wise not to share your location. Especially on websites and apps that are accessible by anyone.

Never accept someone as a 'friend' on social media simply because they claim to know another friend of yours.
Always be cautious about what you say online.

Visit these websites for advice

ChildLine 0800 1111

Webwise

THINK U KNOW .org.au