

Possible threats to Data 2

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List the 8 methods to prevent possible threats to data

- *Physical barriers*
- *Password control of access*
- *Access levels*
- *Anti-virus software*
- *Firewall*
- *Encryption*
- *Backup*
- *Recovery*

Physical barriers

Example:

- *Locks on doors*
- *CCTV cameras*
- *Turning computers off at night*

Password control of access

A strong password should contain:

- *At least 8 characters long*
- *At least one uppercase*
- *A lowercase letter*
- *A number*
- *A symbol*

Access Levels

Ensure people only have access to what they need.

File permissions/ access are read only, read/write and full access.

Anti-virus software

*Software that removes a virus from your computer.
Sometimes it can repair any damage.*

Firewall

Software that monitors data coming in and out of a network. Protects from viruses, malware and hackers. It puts a 'wall' around a network.

Encryption

Turning data into a secret code before sending it over a network or the internet

Backup & Recovery

Backup is making a copy of the data and saving it in a different place. Useful in case the original data gets corrupted or accidentally deleted.

Recovery is copying the data/files from the backup to the original location. Can also use a software recovery tool.

Personal safety & identity theft

- These threats can affect both your security and your reputation. Think about who has access to the information you put online. Before you put photos on your social networking profile, think about who might see them and whether you would mind. You might not want your employer or teacher to see something that might be embarrassing or harmful to your reputation.
- Use security settings to protect your privacy and identity. Remember that not everyone is who they claim to be. Criminals access social networking sites trying to find out information about people. This may put you at risk of identity theft and password theft if you have revealed too much information about yourself. Be careful not to reveal information that you might use in a password, such as your pets name.

UK Legislation

The 4 UK legislations

- **DATA PROTECTION ACT 1998** – businesses must confirm to the eight principles to protect the data that they hold about computers.
- **COMPUTER MISUSE ACT 1990** – this law was created to punish hackers and creators of viruses.
- **COPYRIGHT, DESIGNS AND PATENTS ACT 1988** – copyright protects peoples original data such as artworks, music, code, books, etc.
- **FREEDOM OF INFORMATION ACT 2000** – this gives people the right to see data held about them by organisations, and also to request access to data about organisations such as local councils or national government.