**Curriculum Related Expectations**

Year 9 HT2: Security Systems

**Students can define the following terms:**

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| --- | --- | --- |
| Network | Internet | Firewall |
| Force | Intercept | Theft |
| Denial | Service | Database |
| Policy | Law | Misuse |

**Students know:**

* What a network is and how to keep it safe
* How a firewall works
* Different types of attacks to a system including brute force attacks, data interception & theft, denial of service attack, and a SQL injection
* What a network policy is and why it is important
* The laws around using a computer including the Computer Misuse Act, Copyright, Designs and Patents Act, and the Data Protection Act.

**Students can:**

* Give an example of a network using their home system
* Explain the dangers when using the internet
* Describe what a brute force attack is including the different types and how they work
* Explain how hackers intercept data and steal it using packet sniffers
* Describe what a denial of service attack is using a real life example
* Justify why ethical hackers are needed to prevent attacks such as SQL injections
* Explain why different principles and rules should be included on a network policy
* Say which computer law has been broken when considering certain scenarios