National Centre for Computing Education

Raspberry Pi

Learning graph
KS4 – Cybersecurity

Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 | Lesson 7

Conceptual background

- Define the terms 'cybersecurity' and 'network security'

Motives, ethical and social

- Analyse an attack on a company and identify what motivated the hackers
- Evaluate the potential for cybersecurity careers

Threats

- Describe the features of a network that make it vulnerable to attack
- Understand the impact of cybercrime on businesses and individuals
- Identify and describe non-automated forms of cyberattack
- Demonstrate knowledge of social engineering
- Identify and describe automated forms of cyberattack
- Analyse a cyberattack and identify the weaknesses that enabled it to happen

Prevention

- Identify how software can be used to protect from cyber attacks
- Describe ways that organisations use software to protect against cyberattacks
- Understand the need for, and importance of, network security
- Explain common methods of network security
- Describe different methods of identifying cybersecurity vulnerabilities

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