

What is

hacking?

LEARNING JOURNEY COMPUTING

CYBERSECURITY

GOLDEN THREAD QUESTION

How effective

are online

services in

ensuring

privacy?

What are

online

services?

What is the Data What happens difference privacy to data between data entered and online? information?

> What strategies data being compromised through human

minimise the risk of error?

> How does a DDoS attack compromise the security of online services?

How do these threats impact on society?

WE ARE HERE

How do human

errors pose

security risks to

data?

What is the Computer Misuse Act and why do we need it?

Data security

(threats)

Data security (mitigations)

What is the

Data

Protection Act

and why do

we need it?

What is a network?

This unit takes us on an eye-opening journey of discovery about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks. We will start by considering the value of their data to organisations and what they might use it for. We will then look at social engineering techniques used by cybercriminals to try to trick users into giving away their personal data. We will look at the more common cybercrimes such as hacking, DDoS attacks, and malware, as well as looking at methods to protect ourselves and our networks against these attacks.

TUDOR HABITS

You will develop grit and resilience as you use your computational thinking skills to solve problems caused by threats to computer networks.

VOCABULARY

Data, information, cyber, system, network, data protection (Act), social engineering, DDoS, (black/white hat) hacking, brute force, Computer Misuse Act, malware, bot, data breach, security, privacy, identity

How can networks be protected from common security threats?

Evaluate the most effective methods of preventing cyberattacks