







# **CYBER SECURITY**

## **ELEMENT 2: PRIVACY AND SECURITY**



## **DURATION: 4 SESSIONS**

### YEAR GROUP: KS3/4 OR 5

### **STUDENTS WILL:**

- > Know what personal information is
- > Be able to create a strong password
- > Understand what data protection and GDPR is
- > Know how to protect against viruses
- > Practice and develop skills directly related to Digital
- > Develop life skills
- > Develop employability skills for future employment
- > Hold employee encounters virtual and face to face
- > Acquire and develop an appropriate vocabulary in writing and spoken language
- > Listen to and understand spoken language and use spoken Standard English when appropriate

### **ADDITIONAL NEEDS:**

> Teachers to differentiate according to need

### **NOCH QUALIFICATION:**

#### **NOCN Links:**

- > Cyber Security Y/651/1085
- Learning Outcome 1
- Learning Outcome 2

You can gather evidence through using teacher observation and assessment, photos and activities.

# SKILLS USED FROM SKILLS BUILDER:

- > Listening
- > Speaking
- > Aiming High
- > Problem Solving
- > Creativity

### **KEY WORDS:**

- Digital
- > Safe
- > Cyber
- MalwareVirus
- security > Online
- > Virus protection
- safety > Privacy
- > Security

### **RESOURCES FOR ALL LESSONS:**

- > Computer and internet access
- > Paper, pens, scissors and glue
- > Whiteboard
- > **UN2E201** Personal information
- > **UN2E202** Passwords
- > **UN2E203** Strong or weak passwords

- UN2E205 Data protection and GDPR
- > **UN2E206** What is a virus?
- > **UN2E207** Top tips
- > **UN2E208** Cyber security apprentice job description



### SESSION 1:

### **PRIVACY**



### **ACTIVITIES TO SUPPORT LEARNING**

- 1. What is meant by the word privacy? Ask the students to suggest what they think the word means. Share the definition **Privacy: Protecting people's data and personal information**
- **1a.** Talk about what personal information consists of. What kinds of information does this include? Use the personal information resource to discuss the different examples. You could add 'red herrings' when discussing as a group, can they explain why it isn't personal information?
- 2. Prompt the students with the question 'Why is it important to keep your private information safe?' Discuss as a group their suggestions. Do the students understand the importance and why they should keep it private? It might be helpful to guide the discussion to discuss what might happen if their information isn't kept private.
- **3.** Moving on from the previous discussion, ask the students to suggest what they might do to keep their personal information safe. Record suggestions on the whiteboard or a large piece of paper. Do the students suggest not telling or sharing their information with others, not posting their details online, creating passwords?
- **4.** Looking at the passwords resource, look at the information about passwords and the dos and don'ts to creating passwords. This resource will highlight what will make a strong password and what makes a weak password.

# LEARNING OUTCOMES

- > Know what is meant by the term privacy
- > Understand why it is important to keep personal information safe
- > Recognise ways to keep personal information safe
- > Understand the importance of passwords
- > Know how to create a strong password
- > Understand what 2 step verification is

#### **NOCN links:**

- > Cyber Security Y/651/1085
- Learning Outcome 1
- Learning Outcome 2

# DIFFERENTIATION AND RESOURCES

- > Computer and internet access
- > Whiteboard
- > Paper and pens
- > Scissors and glue
- > **UN2E201** Personal information
- > UN2E202 Passwords
- > **UN2E203** Strong or weak passwords
- > UN2E204 2 step verification



| ACTIVITIES TO SUPPORT LEARNING   | LEARNING OUTCOMES | DIFFERENTIATION AND RESOURCES |
|--|-------------------|-------------------------------|
| <b>5.</b> Now using the strong or weak passwords resource, encourage the students to sort the passwords into the correct category. This may be a good opportunity for a group discussion. Did all students have the same answers? Can they explain why they have sorted their answers into those categories?   |                   |                               |
| <ul> <li>6. As technology has developed, the need for more security has increased. The introduction of 2 step verification has become a common approach to adding extra security online. Have the students heard about this? Have they experienced it themselves trying to log into an online account?</li> <li>2 step verification, also called two-factor authentication, can be described as extra layer of security to your account in case your password is stolen. Use the 2 step verification resource to help learners understand how this extra layer of security is important and how it might look for someone completing a 2 step verification check.</li> </ul> |                   |                               |
| TASK VARIATION: If able, provide students with the opportunity to practice creating a password. This could be for a computer log in, school email, school portal etc. Remind students that they should create strong passwords.  PMLD TASK VARIATION: Listen to the sounds created whilst typing passwords. Allow students to type on a keyboard for the sensory experience. You may also like to listen to these:  Typing Wrong Password Sound Effect Password input sound Input Password   |                   |                               |



### SESSION 2:

### DATA PROTECTION AND GDPR



### **ACTIVITIES TO SUPPORT LEARNING**

#### 1. What is data protection and GDPR? Ask the students if they have heard this term before? Do any students know what it means? Share the definition with the group: Data protection is the process of protecting sensitive information from damage, loss, or corruption. GDPR provides a legal framework for keeping everyone's personal data safe by requiring companies to have robust processes in place for handling and storing personal information.

Use the data protection and GDPR resource to look at what data protection is and the laws associated with it. Were the students aware it is law?

The resource also highlight the 7 principles associated with GDPR. Discuss these with the students. You may need to adjust the language used to make it suitable for your learners.

This video is available to explain different aspects of data protection and GDPR but it is very long so you may want to select certain sections to show the students.

2. Using the information they have learned about data protection and GDPR, ask the students to create a digital poster to promote best practice, the dos and don'ts of data protection and GDPR. This could be shared on the setting's website or within specific rooms such as the office, staff room, computer rooms.

TASK VARIATION: Many settings will already have data protection and GDPR posters, policies, rules. Share your own settings and then on workplace visits, explore and ask how they promote data protection and GDPR with their employees.

## **LEARNING OUTCOMES**

- > Understand what data protection and GDPR is
- > Understand the key features of data protection and GDPR
- > Create an informative poster to promote data protection and **GDPR**

### DIFFERENTIATION AND RESOURCES

> Computer and internet

- > **UN2E205** Data protection
- and GDPR

access



### **SESSION 3:**

### **VIRUS PROTECTION**



### **ACTIVITIES TO SUPPORT LEARNING**

- 1. What is a virus? Ask the students what they think it means? They may talk about illness, being unwell etc. but do not correct them. Share the definition: A virus is a type of malware that spreads by attaching itself to other programs. It's named after the viruses that make people ill, like the common cold. Use the what is a virus resource with the students to support with their understanding.
- **2.** Ask the students why they would need to protect against viruses? Do they know what they can do to protect against viruses? Create a discussion and record the answers on the whiteboard or a large piece of paper. Use the top tips resource to support the students with understanding what they can do to protect their digital devices from viruses.
- **3.** Most digital devices will have a form of virus protection installed to prevent viruses from infecting and harming your device. You might like to use this website to show the learners what they can do to prevent viruses. How can you reduce the risk of getting a virus?
- **4.** Show your students the virus protection software installed on your device and on other devices that they might use. Demonstrate how you can complete a device check. Where possible, allow your students to complete a virus check and follow the instructions step by step.

**TASK VARIATION:** You could set the students a home task of completing a virus check or installing an anti-virus software onto their own digital device at home.

# LEARNING OUTCOMES DIFFERENTIATION AND RESOURCES

- > Understand what a computer virus is
- > Recognise why virus protection is important
- > Know how to protect digital devices against viruses
- > Complete a virus check on a digital device

- > Whiteboard
- > Paper and pens
- > **UN2E206** What is a virus?
- > **UN2E207** Top tips



### SESSION 4:

### **JOB DESCRIPTION EXPLORATION**



| ACTIVITIES TO SUPPORT LEARNING  | LEARNING<br>OUTCOMES   | DIFFERENTIATION AND RESOURCES                     |
|---|--|---|
| Allow the students to look over the job description:  See if they have met any of the skills through the sessions?  Did they find any of the skills easy?  Did they find anything difficult?  Had they completed some of the tasks before?  See if this would be something they would like to do as a job?  For those that wish to, you could hold a mock interview asking questions around the skills they have learned related to the Digital sector. | Skill identification  Linking activity to careers and subject learning  > Speaking  > Listening  > Reading | > <b>UN2E208</b> - Cyber security job description |
| Use the Your Future Opportunities job directory to search for relevant job profiles within the sector. You might like to encourage learners to identify and look at:  • Different job roles • Qualifications required • Local job vacancies  ADDITIONAL NOTES:  |  |   |
| These website may be of some use for you during this element.   |  |   |
| How to keep our personal information private  |  |   |
| Be Internet Legends curriculum  |  |   |