

# Cybersecurity: the low-down



## Lesson 3

## Resources

- PowerPoint presentation

Intro (10 mins)  
Slides 2-9

# Introduction

Use the slides to introduce the lesson, the module overview, and learning objective for today. Make sure to recap on slide 4's 'Big Thinking' question: how can we use cybersecurity measures to effectively protect all online users as technology develops?

If you think your students need to recap some of the key learnings around cybersecurity, use slide 9 to generate some discussion. The answers are provided below:

1. Why is cybersecurity so important?
  - *It enables us to put measures in place which protect our devices, privacy and data security. The more we come to use and rely on interconnected technology, the more at risk we are from cyberthreats.*
2. Name some examples of cybersecurity threats and how they work.
  - *Phishing is where scammers send emails, DMs or other digital messages pretending to be from reputable companies, convincing recipients to send personal data or click on unsecure which can download malware.*
  - *Malware is a type of malicious software that blocks the user from getting onto their digital device until they have paid the criminal a sum of money.*
  - *Denial of Service (DoS) attacks are where the criminal disrupts or shuts down a server, service or network so that it can't be accessed by the lawful owners.*
  - *Corporate Account Takeover (CATO) is type of work-based identity theft where a user gets unauthorised access to a company's bank account. They can then easily steal money and/or customers' sensitive data.*

- *Impersonation scams are attacks often launched via social media where fraudsters impersonate trusted businesses, friends or family to steal their victims' money or personal information.*

3. What is encryption and decryption? Why are they needed in cybersecurity?
  - *Encryption is a way of concealing a message so it can be sent secretly. Decryption is the process of decoding the message by using a 'key', i.e. a piece of information which, when passed through an algorithm, can encrypt or decrypt the data. Encryption is needed in cyber security to protect our data in case it gets intercepted by a cybercriminal.*
4. Why are some groups of people potentially more at risk from scammers?
  - *Older people may be less familiar with new technology and therefore unaware of potential cyberthreats, making them easier to scam*
  - *People with learning disabilities may need longer to process information and therefore make it easier for cybercriminals to confuse or deceive them*
  - *Young people use the internet every day, in many aspects of their lives, to share data and connect with others. This makes the likelihood of them being exposed to cybercrime much higher*



## Test your knowledge

- ① Why is cybersecurity important?
- ② Name some examples of cybersecurity threats and how they work
- ③ What is encryption and decryption? Why are they needed in cybersecurity?
- ④ Why are some groups of people potentially more at risk from scammers?

## Resources

- PowerPoint presentation
- 'Digital campaign' planning template

**Starter (15 mins)**  
**Slides 14-16**

# Project brief

Show slide 11 which sets the project brief. Explain that students are going to imagine that they are working in a cybersecurity team to develop a campaign that raises awareness around cyberthreats – how to detect and avoid risks. They will be using Canva, a digital design tool/app, to build visually impactful posts as part of a social media campaign.

If you completed the previous lesson, get students into the teams they worked in before. They should then look back over their pen portraits and remind themselves:

- Who their user group is
- The day-to-day challenges they face
- How they might be targeted by cybercriminals

For students who are thinking about the 'Over 75' user group, you might want to encourage them to design a campaign for the children of these users as over 75s might not be as active on social media as other user groups.

If you're delivering this without the previous lesson, get students into small groups and assign each team one of the users detailed on slide 12. Conduct a brief discussion around how these groups may be more at risk of cyberthreats and what information they need in a campaign to raise their awareness.



Imagine you are working in a cybersecurity team. In small groups, you will create a digital campaign to raise awareness of cybersecurity threats and protection measures. This will be targeted at a specific user group that may be more at risk of cyberattacks. The assets you create should be designed for promotion on social media.

You should use your understanding of different cyberthreats, as well as the pen portraits of your user group to inform how you put together your campaign. You'll also explore a digital design application to make your campaign interactive and engaging for your audience.

## Recap: groups at risk

### User groups who may be at additional risk of cyberthreats:

- People under 25
- People over 75
- People with disabilities
- People with mental health issues or mental illness

### These groups might be more at risk because they...

- 1) They may use assistive technologies – these can be more vulnerable to attack especially if connected to the IoT
- 2) They may be less aware of the range of cybersecurity threats and the steps they need to take to protect themselves
- 3) They have specific challenges and anxieties which criminals can use to exploit them
- 4) They may leave their house less often and so are more likely to pick up the phone if a cybercriminal calls in the day
- 5) They may need some extra time to process and understand information, and so will be more easily persuaded to take action quickly or without the time to check for risks

You can also use slide 12 to scaffold a recap activity for students who have already completed lesson 2 of this module.

Run through the planning slide on slide 13. Using the 'Digital campaign' planning template, students will spend this lesson planning their campaign. They will then present their campaigns to the rest of the class in the next lesson.

They should think about:

- What information does the audience need to know to protect themselves from cyberattacks?
- What format or approach would best engage the audience? E.g. image and text, or an animation? Should they focus on facts and figures or tell a story?

Their social media campaign should:

- Include at least 3x social media posts, with images, text and/or animation. These could be standalone, or used to tell a story / linked together.
- Be made using Canva to make it visually impactful, interactive and educational.
- Be easy to understand and appealing to the audience.

## Resources

- Internet-connected devices (e.g. tablets) – one per small group
- Access to the internet
- Canva educator account set up

Campaign design (40 mins)  
Slides 12-14

# Design your campaign

Ahead of this activity, you'll need to spend 10-20 minutes following these steps to set up Canva and invite your students to collaborate:

1. If you don't already have a Canva education account, visit [www.canva.com/education](http://www.canva.com/education) and click 'Get verified', then follow the instructions to set up your Canva account
2. Once logged in to your educator account, click the gear icon in the top right corner to go to your settings
3. Select the 'Classes' tab and then select 'Create class', follow the instructions shown
4. Select the '+ people' option and then click 'Invite people' at the top of the page shown
5. Copy and paste the invite link from the pop-up so that you can share this with the class. A space has been provided on slide 13 to help you do this. Students will then be able to access your Canva folder and upload their work
6. Create and publish an assignment using the steps shown here: [www.canva.com/en\\_gb/help/publish-canva-assignments](http://www.canva.com/en_gb/help/publish-canva-assignments). You can either give students a blank template and allow them flexibility in choosing an approach, or provide more structure by selecting a preset template which can then be edited

More information on setting up Canva as an educator can be found here:

- [www.canva.com/en\\_gb/help/create-and-customize-classes](http://www.canva.com/en_gb/help/create-and-customize-classes)
- [www.canva.com/help/invite-teachers-and-students](http://www.canva.com/help/invite-teachers-and-students)

Explain that students will be using Canva, an online design application, to create their campaigns. Play the introductory video on slide 15 to introduce them to Canva if they haven't used it already. The steps on the same slide also show students how to access the assignment you have set up along with some supporting resources.

They should spend some time initially mapping out some ideas on paper, before exploring the functionality available to them on Canva.

They can be as creative as they like – ask the group to briefly share some ideas about the different formats a social media campaign might take. For example, it could feature:

- Case studies of people (based on their pen portraits) sharing their experiences
- An animated graphic introducing some cybersecurity stats and top tips for staying safe
- A series of posts about a character facing cybersecurity risks and posing questions to the audience

You can show the images on slide 16 as an example.

Once they have some ideas, allow them the rest of the session to use Canva to create their campaign.

