

Lesson 1 : What is social engineering?

Task 1: Watch the video “Watch how a social engineering hack works”

<https://edition.cnn.com/videos/business/2019/10/17/hacked-tech-reporter-social-engineer-or-g.cnn-business>

CNN tech reporter Donie O'Sullivan thought he was being safe on social media. Watch social engineer & Social Proof Security CEO Rachel Tobac prove him very, very wrong.

Task 2: Discuss the video

Identify 3 things that the hackers took advantage of to hack Donnie.

Identify 3 things Donnie could have done to protect himself from being hacked?

More advanced and detailed Video: Interview with hacker Kevin Mitnick on all things Social Engineering who now runs a business doing ethical hacking.

<https://www.knowbe4.com/what-is-social-engineering/>

Task 3: Think/Pair/Share: Develop a definition of Social Engineering

Having watched the video students can develop their own definition of social engineering individually and then compare it to their partner's definition.

Which one do you prefer? Why? How could it be improved?

Pairs can then move to larger groups and repeat the process.

Task 4: Relating to real-life examples

 What is social engineering? <https://youtu.be/5ZqNX6YeH6c>

Can you think of any examples of social engineering that you have experienced? How did it try to get you to give away information?

Is social engineering new?

Can you think of examples of social engineering that existed before the internet existed? (prompt: are Séances, fortune tellers examples of social engineers?)

What do you think are the traits you would need to be a good hacker using social engineering?

Task 6/HW task: Identify 5 types of social engineering and write a sentence in your own words explaining how it works.

Extension: Watch the movie Catch Me If You Can (PG-13) or read the article

<https://www.businessinsider.com/frank-abagnale-crimes-2012-4?r=US&IR=T#he-forged-his-own-pilots-id-and-faa-license-3>

How does this movie/article relate to social engineering? Can you identify tricks that Frank Abagnale uses that modern hackers might also use?

Lesson 2: Project - set up

Task 1

Each group selects one of the following topics - the topics they covered as their HW for lesson one here can be helpful to form groups and get them started.

- Phishing
- Vishing
- Smishing
- Pretexting
- Baiting
- Tailgating
- Piggybacking
- Quid Pro Quo
- Blagging
- Pharming
- Shouldering

Task 2 Planning Tool for Project

Students read through the headings, plan first steps, decide who work will be presented and assign roles using the table below.

Headings in yellow are discussed and answered as a group. Sections in green can be assigned as individual topics within the group. They can decide how many headings each person should take.

Heading	Who	Agreed next steps/actions
What is it?		
How does it work?		
Examples		
Who benefits?		
Countermeasures businesses/government		
Countermeasures Personal		
Media Coverage		
What do you think should be done about it?		
Other questions you have		

Lesson 4 Project development

Project development and coordination of presentation of project. Students continue to use the project planning tool to record learning, ensure everyone has a role, and plan next steps. Students choose and plan how they wish to present their project e.g. posters, slides, digital storytelling, a dramatic retelling, but it addresses all the headings in the planning table.

Lesson 5/6 Project presentations and viewing

Students

- Identify what makes each form of social engineering different
- Identify what they all have in common
- Identify common personal countermeasures
- Rate the different types of social engineering in terms of the threat they pose.

Lesson 7/HW Reflection

Design a poster/write a blog/ create a video/TikTok/Reel advising people (or a specific audience) how to avoid one of these attacks

Or

Write a letter to the Minister of the Department of Environment, Climate, Communications outlining what steps you think the government should take to protect people from such attacks.

Suggested Resources:

https://www.dataprotection.ie/sites/default/files/uploads/2020-04/Guidance_for_Organisations_on_Phishing_and_Social_Engineering_Attacks_Oct19.pdf

<https://www.itgovernance.eu/en-ie/phishing-penetration-test-ie>

<https://www.bbc.co.uk/bitesize/guides/znnny4j/revision/2>

<https://www.knowbe4.com/>