

SECRETS OF THE CYBER WORLD

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INSTRUCTIONAL DESIGN | Harvard University

Lesson Summary:

In this lesson, students will learn:

- The 3 categories of hackers
- The types within the categories, as well as their motivations
- That the physical world is being attacked through cyber space
- The top 5 cyber safety tips
- About the talent crisis and why we need everyone to help

Time Allotment:

One 50-minute class period, with extension options.

Learning Objectives:

By the end of this lesson, students will:

- Understand the difference between the types of hackers as well as their motivations
- Be able to reflect on how the cyber world impacts the physical world
- Be able to discuss the top 5 cyber safety tips
- Examine the challenges of the talent crisis, and understand why it is so important that the general populous get interested in cyber security

Learning Activities:

Students will watch a 20-minute film, and have a discussion before, during, and after the film. Additionally, there will be homework, that can be broken up into a few days so that students have the ability to make sense of what they have learned.

Lesson Plan:

Pre-film discussion questions:

- What type of people are hackers?
- What do we mean when we say hacking?
- Who do you think is doing it?

Stop code discussion questions:

1. At minute 8
 - When we talk about the categories of hackers, we refer to them based on a hat color. What are those three categories of hackers?
 - What are the 4 types of black hat hackers?

2. At minute 15

- What are the top 5 cyber security safety tips?

End questions: Full class discussion

- Do you have to be a programmer to work in cyber security?
- What types of roles are there in cyber security?

Homework:

Essay: (Ask students to pick a question and write an essay about it)

1. How do you envision yourself in the cyber security field? What type of role might you be interested in, why?
2. Chose one of the types of hackers that is either in the black hat or white hat community, and discuss their motivations.
3. Why is it so important for students to consider a career in cyber security?

News: (can be a few days later, does not have to be that same night)

- Find an interesting article to bring to class and have them teach to the class what they learned

Meme Campaign:

- Create a poster about what students in the school should be doing to stay safe