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Cyber Threats

1 Week

Lesson Overview

This lesson will further explore cyber threats and the impact they have on protecting your personal information. An unplugged activity on encryption will illustrate one way that information is secured on the Internet.

The assignment covers various cyber safety strategies and how to protect against cyber attacks such as phishing, spoofing, and DDoS. The assignment is designed to enhance understanding of cybersecurity concepts and how to remain cyber safe!

Learning Objectives

- Recognize phishing attacks and develop strategies for how to detect and prevent falling victim to them.
- Develop awareness of various types of cyber threats and vulnerabilities.
- Explain how DDoS attacks can potentially impact websites.
- Evaluate cybersecurity recommendations and analyze the tradeoffs with implementing them.

RI CS Proficiency



Cybersecurity

- ✓ Risks
- ✓ Safeguards
- ✓ Response



Responsible Computing & Society

- ✗ Culture
- ✓ Safety, Law, & Ethics
- ✗ Social Interactions

Lesson Material

The following course material will help you learn the concepts necessary to complete the Cyber Safety assignment.



Use Cyber.org's module on [Online Threats & Vulnerabilities](#) (in student assignment). This module consists of 4 interactive lessons that include short videos, short readings, and questions.



Watch: [Encryption & Public Keys](#) [6:39 min | [transcript](#)]



Do: Unplugged Activity

- Follow the CodeHS Hour of Code Activity on Encryption
 - [Cryptography: The Caesar Cipher](#)
- Limit this activity to 45 minutes
- Printable template: [Caesar Cipher Wheel](#)

Student Activity Guide



[Cyber Threats Assignment](#)

Teacher Resources



[Cyber Threats Slides](#)



[Cyber Threats Grading Rubric](#)



[Cyber Threats Answer Key](#)



[L09 Vocabulary](#)

Optional Extension

- Cyber.org's [Encryption with the Pigpen Cipher](#)
- [Hour of Code: Simple Encryption](#) (includes encryption video from lesson)
- [Spot the Attack Worksheet](#) [Answers: C, D, A, F, I, E, B, H, G]
Also suitable to assign this as homework