## Cybersecurity in the News

### Suggested Use in the Classroom:

- Case Study Fridays: Choose one news story a week and have students analyze it.
- **Cyber Incident Breakdown:** Assign students to summarize what happened, identify key vulnerabilities, and recommend solutions.
- **Reflection Journals:** Use our *Cyber in the News* template to help students process and connect classroom concepts to real-world events.
- Class Debates: Host discussions about ethics, privacy, and security based on current cases.

#### **Go-To News Sources for Case Studies:**

- CyberScoop
- The Hacker News
- Krebs on Security
- NPR Technology & Cybersecurity
- CISA news-events
- Dark Reading

Use the example case study strategy provided below as a guide for integrating real-world cybersecurity events into classroom discussions and activities.

Use our Cyber in the News template below to help students process and connect classroom concepts to real-world events.



### Teaching Strategy: Incorporate real-world examples (Case studies)

Incorporating real-world examples and case studies into the classroom can create a dynamic learning environment by providing students with concrete examples of how cybersecurity concepts and principles are applied in practice. This approach helps students to understand the relevance of what they are learning and to see how the concepts and principles can be used to solve real-world problems. By studying real-world examples and case studies, students can learn how cybersecurity threats and attacks work in the real world, and how they can be prevented and mitigated. This can help to build their critical thinking and problem-solving skills, as they learn how to apply what they have learned to practical situations. Real-world examples and case studies can provide a context for students to work in teams and to collaborate with each other to solve complex problems. This can help to build their communication and interpersonal skills, as well as their ability to work effectively in a team. Incorporating real-world examples and case studies into the classroom can create a dynamic learning environment that engages students and helps them to develop the skills and knowledge they need to succeed in the field of cybersecurity.

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# Teaching Strategy: Incorporate real-world examples (Case studies) Cryptography Demonstration

- 1. Begin by introducing the concept of cryptography and its importance in maintaining privacy and security in the digital world.
- 2. Next you can present a real-world example of a cryptography breach as a set induction.
- 3. After presenting the real-world example, divide the students into small groups and assign each group a specific topic from the following list:
  - a. The WannaCry Ransomware Attack (2017)
  - b. The Equifax Data Breach (2017)
  - c. The Capital One Data Breach (2019)
  - d. The SolarWinds Supply Chain Attack (2020)
  - e. The Marriott International Data Breach (2018)
  - f. The Target Data Breach (2013)
  - g. The Yahoo Data Breach (2013-14)
  - h. The Anthem Data Breach (2015)
- 4. The students will write an analysis of the breach they selected that includes answers to the questions below: (The 6 questions below are from https://www.netacad.com)
  - a. Who were the victims of the attacks?
  - b. What technologies and tools were used in the attack?
  - c. When did the attack happen within the network?
  - d. What systems were targeted?
  - e. What was the motivation of the attackers in this case? What did they hope to achieve?
  - f. What was the outcome of the attack? (Stolen data, ransom, system damage, etc.)
- 1. Have each group present their findings to the class. Encourage students to ask questions and to provide feedback to one another.
- 2. After the presentations, have a larger class discussion about the real-world example and the role that cryptography plays in protecting sensitive information in the digital world. Ask students to reflect on what they have learned and to consider how they can use cryptography to maintain privacy and security in their own online lives.

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# Cyber in the News: Student Analysis Template

Use this template to help students reflect on current events in cybersecurity and connect them to classroom learning.

Article Information
Title of Article:
Source (Website/Publisher):
Date of Publication:
Link to Article:

### **Summary of the Article**

Write a brief summary of the article in your own words. Include the who, what, when, where, and why.

### **Cybersecurity Connection**

What cybersecurity concept(s) does this article relate to? (e.g., phishing, social engineering, malware, data privacy)

### **Reflection & Analysis**

Why is this article important? What can individuals, businesses, or governments learn from this event?

#### **Personal Takeaway**

What did you learn from this article? How does it connect to what you've learned in class?

