

Cybersecurity Breakout Game

TOPIC: FOUNDATIONAL PRINCIPLES OF CYBERSECURITY, ONLINE SAFETY AND SECURITY

GRADES: 6-8, 9-12

LESSON DURATION: 45 MINUTES

Introduction:

- This breakout game is designed to challenge students in a collaborative and engaging way. Through the completion of tasks and challenges, students will learn about online safety. Students will be challenged to think about their own cyber habits while completing the breakout activity. This activity can be used in any course in which the teacher wants to engage students in a hands-on lesson that teaches both real world and soft skills.
- *This lesson requires the teacher to have access to a Breakout.edu kit or the supplies needed to complete a Breakout activity.
- **This lesson was made in partnership with Terra Klein, Instructional Coach.

Learning Outcomes:

- Students will work collaboratively to solve problems and complete a breakout scenario.
- Students will verbalize online safety tips after successful completion of the activity.

Materials:

- [Access to Breakout materials](#)
- [Folder with all materials and instructions](#)
- [Presentation with instructions and post-game review](#)
- [Online Safety Tip Sheet](#) (Post-game)

Activities:

1. The teacher should review all instructions, materials, and game activities prior to attempting this activity in class.
2. The teacher should also decide on a proper format; full class participation; 2 teams in competition; or multi-team competition. Competition can serve as an incentive and increase activity while decreasing "freeloader" syndrome.
3. The teacher should begin by reading the [overview](#) provided. All activities are briefly described on this page. This page should not be shared with students. Instructions for setting up the game are included as well as a materials list.
4. The teacher should make copies of the following materials. Each team will need access to one of each item. If the whole class is participating together, only one copy of each is needed.
 - A. [Emma's boarding pass/airline ticket](#)
 - B. Credit card ([front](#) and [back](#))-laminated

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- C. Fake social media profile (IG)-all three sections
 - I. [Worksheet](#)
 - II. [Fake IG profile](#)
 - III. [Fake IG bio](#)
 - D. [Fake Phishing Email](#)
 - E. [Fake ransom letter](#)
 - F. [Ciphertext ransomware message](#)
 - G. [Cryptogram](#)
 - H. [Caesar cipher wheel](#) (already put together) and message to decipher
 - I. [Fake text message exchange](#)
5. Helpful hints: If students have never done a Caesar cipher, a brief introductory demonstration should occur the day before the activity. If students have no background in a Cryptogram, consider filling in more letters. If students are advanced, consider less letters. Students may also may struggle with the Amazon phishing email activity. Students may not understand social engineering. They also may struggle with knowing a CVV and its use. This game was tested with a 6th grader and a 2nd grader. These are the items that slowed them down in completion of the game.
 6. Hide the items that need to be hidden. Make sure all locks are set as needed.
 7. Introduce the game. Explain the rules using the slides. Slides 1-7 should be used to introduce the game. Allow students time to work. Facilitate as needed. Each team is allowed two hints. Be prepared with hints, as needed.
 - A. If students have never done a breakout activity prior to this one; the teacher may consider giving some background information the day before the activity in order to save time.
 8. Once the game time is up, use the slide show to review the content and information. Slides 8-the end serve as a review of the game contents. Even if no group broke out, be sure to spend time reviewing the content so that all students learn safe online behaviors.
 9. The teacher might consider assigning a follow-up task in which students apply what they learned from the game. Examples include a video project on one or all of the online safety topics; poster creation for educational purposes over one or all of the online safety topics; a journal entry reflecting on a topic such as social media-asking students to reflect on their behaviors while on social media; or a follow-up activity on digital footprints. There are many options for the teacher to choose from if enrichment is desired.
 10. The teacher could also choose to use the Online Safety Tip Sheet linked above. After the activity, students could be required to check all the behaviors that Emma violated. A discussion could occur on basic online safety to reinforce the activity.