

# What Happens to My Online Information?

TOPIC: ONLINE SAFETY AND SECURITY

GRADES: 3-5

LESSON DURATION: 45 MINS

SOFT SKILLS: COMMUNICATION, COLLABORATION

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## Learning Outcomes:

- Students will be able to effectively and safely respond to online questions and solicitations.
- Students will recognize danger and feel empowered to report unwanted online interactions.
- Students will model this behavior to others.
- Students will trace the path of online information and understand the dangers and threats that occur as information moves.

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## Materials:

- Teacher made cards: equal number of cards with A (internet), B (websites/social media), C (computer user); 3 cards with red hats (cyber criminals)

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## Activities:

1. In this activity, students will simulate that way in which data moves across the internet. The teacher should give very little introduction other than to tell students they will learn how the internet works.
2. Have each student draw a card. They should not show others what the cards says. The teacher should meet with each member of the group individually so that the others do not know the roles.
3. For instance, the teacher should call all A's to the hallway. Explain to these students that they will play the role of the internet/routers. Once they receive information, they need to figure out where it should go. They are responsible for taking the post-it notes from the users and transferring each one to the appropriate website. They also must take the post-it note (once the question is answered) from the website back to the user.
4. Next call the B's to the hallway. Explain that they are the internet users. This group should develop a list of questions/actions. They should think of the things they use their device for each day-social media, emails, research, etc. They put their questions/actions on a post it and send them to websites on the Internet like their bank or friend or shopping site, etc. Each post-it represents a data packet. Allow these students 10 minutes to write least 5 questions on their post-it notes.
  - *\*If this will be difficult, the teacher may consider giving each student a handful of pre-written questions/actions. Examples: writing an email, posting a music video, playing an online game, shopping on Amazon, checking my Instagram account, posting on SnapChat,*

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*researching for a class project, searching for information about a bird I saw outside, texting my mom, emailing the teacher a question, etc.*

5. Lastly, call the C group to the hallway. Group C will play the role of the websites and they try to answer the questions given to them by the users. Each student should be assigned one of the following labels: texts, social media, search engine, email, online shopping website, online gaming website, YouTube/streaming website.
6. In a secretive way, meet with the group of three red hats. They are going to play the role of cyber criminals. Once the simulation begins, they have free reign to take paper from the internet as they work to move the information back and forth from the user to the website. Explain that they should let certain items in. They can read each thing and decide if they want to take it or allow it through. Any information they take, they should collect on their desks. No other students can touch it.
7. Begin the simulation. Users should begin to transfer their content to the Internet. The internet should take it to the appropriate website. Meanwhile the criminals have free reign. Allow the simulation to go if needed.
8. Once enough time has passed, stop the movement. Begin a discussion.
9. Ask a member of each group to identify their role. What was their task? Talk to the students and see if they can figure out who the random three students were. What could have been done to prevent their success? (encrypt data in a secret code, don't include information they wanted to steal, etc.).
10. Although simple, this activity will teach students to understand data movement in a non-technical hands-on fashion while also getting them to think about the information they share and the need to protect it.
11. The teacher may consider one of the following videos for debriefing purposes.
  - <https://www.youtube.com/watch?v=uvOJY3uYjYQ>
  - Recommended: Code.org. There is a whole series that the teacher can use to explain the details of how the internet works. <https://www.youtube.com/watch?v=Dxcc6ycZ73M&list=PLzdnOPI1iJNfMRZm5DDxco3UdsFegvuB7>

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