



CLASSROOM ACTIVITY

Social Engineering: Scam Alert!

Objectives

Students will be able to:

- **Compare** and **contrast** websites in order to understand the warning signs of an illegitimate site.
- **Analyze** and **annotate** sample phishing emails.
- **Synthesize** their learning as they develop their own scam email and an explanation of the warning signs it includes.

Overarching Question

How can I protect myself from Internet fraud and scams?

Activity Summary

In this activity, students will become members of their school's Scam Alert Team in order to help protect their community from Internet scams. The class will compare and contrast phony and real websites and investigate phishing emails as they learn tips and tricks for identifying scams. Students will then create their own phony email, complete with annotated warning signs, that they can use to educate their school community.

Grades

4–6

Timing

50–60 minutes

Materials

- Device with the ability to project, one for the teacher
- Exhibit A: Website Scams handout, one per student
- Exhibit B: Email Scams handout (2 pages), enough for half the class
- Devices, enough for half the class
- Printer, one for the class



Activity Directions

Premise | 5 minutes

- Ask students the following set of questions. For each question, instruct them to demonstrate an answer of “yes” by raising a hand or an answer of “no” by shaking their head. Ask:
 - If someone on the phone told an adult in your family that they won a free vacation and they only had to share their banking information in order to redeem their prize, should they do it?
 - If you saw a pop-up on a website that said you would receive a million dollars if you clicked on a link, would you do it?
- Go on to explain that while it may seem obvious that these are not true, there are plenty of scams—in both emails and on websites—that can be harder to catch. While we’re taught from a young age to be wary of strangers and unknown phone calls, it can be harder to tell fact from fiction online. For this reason, it’s not uncommon for children, teenagers, and adults to fall victim to scams.*

*If needed, define *scam* as fraud or a dishonest scheme meant to trick someone in order to get money or credit card numbers, Social Security numbers or other personal information that could eventually be used to steal money.
- Tell students that today, they are going to become members of the ____ School Scam Alert Team so they can educate their peers on how to recognize scams and not fall victim to them in the future!

Investigate | 20–25 minutes

- Begin by asking students if they have ever heard about any Internet scams. What information can they share about these scams?
- Go on to explain that Internet scams can take many forms, but one common way is through websites. Tell students that their first task will be to work as a class to compare and contrast a legitimate website with a scam website. To do so:
 - Make a three-column T-Chart on the board, with the headers: “Scam Website,” “Both Websites,” and “Real Website.”
 - Distribute one Exhibit A: Website Scams handout to each student and explain that this is an example of a recent website scam.
 - Pull up an example of a legitimate antivirus website.
- Then work as a class to compare and contrast the real website with the scam website, using the whiteboard while the students take notes at the bottom of Exhibit A. Once you have created a list of similar and different features, ask students:
 - Based on these comparisons, what conclusions can you make?
 - What tips could you provide to prevent someone from being tricked into using a scam website?
- Next, explain that another popular way of scamming people is through a process called phishing. Write this word on the board and explain that phishing occurs when a scammer pretends to be a legitimate person, organization, or company and sends you an email that tries to trick you into revealing personal or financial information about yourself. Sometimes, the scammer is even able to make the email look like it is coming from someone you know!

TECH

for Tomorrow

- Ask: Why might this scam be called phishing?
- Divide students into pairs and distribute one Exhibit B: Email Scams handout to each pair. Read the directions aloud and then give students about 10–15 minutes to complete their work.

Solve | 25–30 minutes

- Bring the class back together and take a few minutes to summarize the warning signs that each pair compiled. Be sure the list includes:
 - Grammatical and spelling errors
 - A sense of urgency
 - Greetings that don't call you by name
 - Request for account or billing information
 - Suspicious email addresses or email addresses that look like they could be coming from someone you know
- For the time remaining in class, explain that each pair will develop a sample phony email that they can distribute to their school community to help them learn how to recognize scams. To do this, each pair should:
 - Review their three-column chart about phony websites and the written and visual elements that real and scam websites share.
 - Use a device to develop a phishing email that includes as many warning signs as possible. Encourage students to be creative: Their email should look convincing, but also contain several warning signs.
 - Print their completed email.
 - Annotate and explain the email's warning signs so others can learn from it!

For instance: Student could highlight every grammatical error, and then use the same color to explain in the margins that frequent grammar mistakes are one sign of a phishing email.

Note: If devices or a printer are not available, students may handwrite their emails instead.

Optional Extension

Students can turn their emails into fliers that they hang in their school community to educate their peers and teachers. Their fliers should include a header that explains the campaign goal to increase awareness of Internet scams.



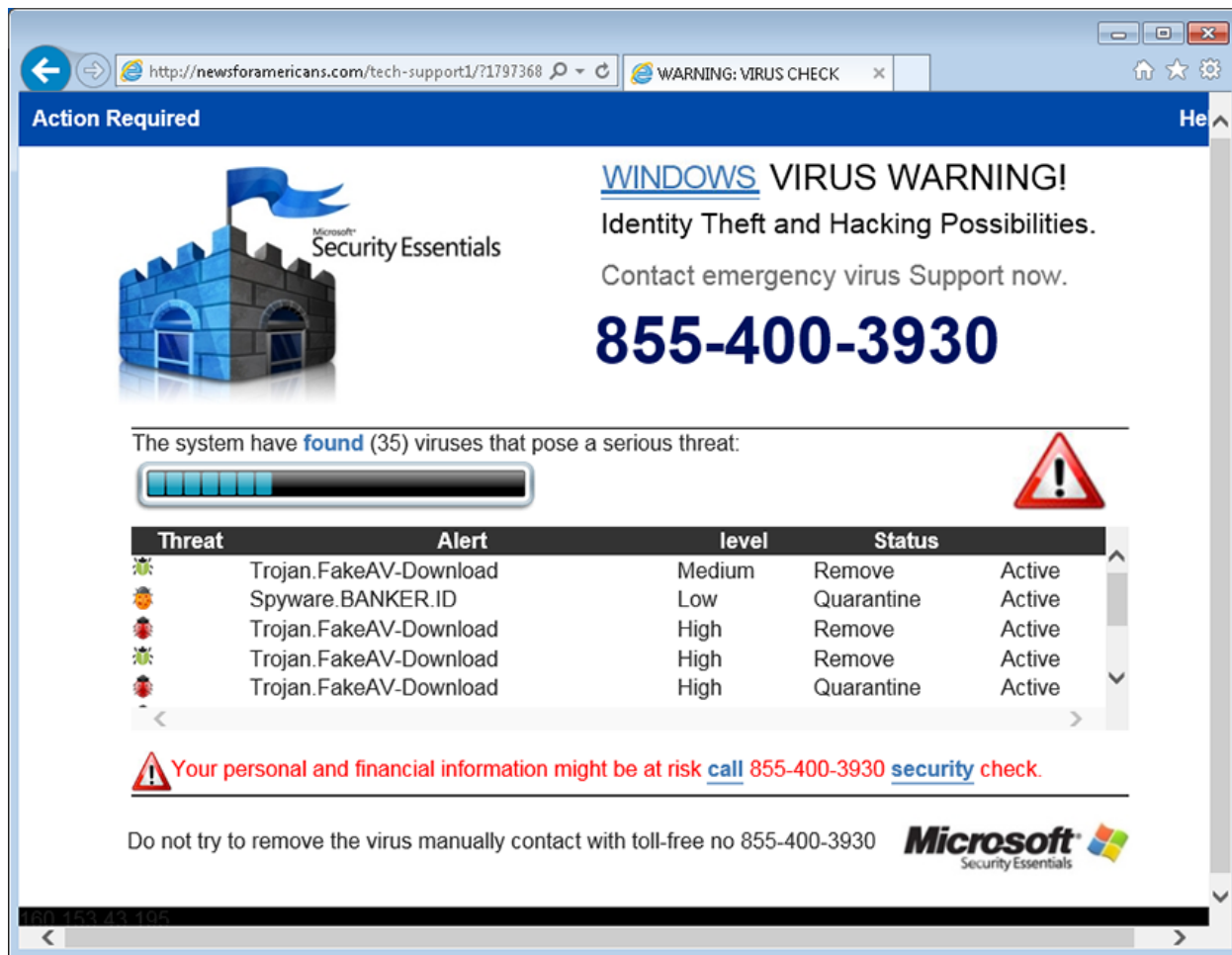
Standards

Common Core English Language Arts Standards

- Reading: Informational Text
 - CCSS.ELA-LITERACY.CCRA.R.9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
- Writing
 - CCSS.ELA-LITERACY.CCRA.W.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Standards for Technological Literacy (ITEEA) Standards

- Standard 4: Students will develop an understanding of the cultural, social, economic, and political effects of technology. In order to recognize the changes in society caused by the use of technology, students should learn that:
 - B. When using technology, results can be good or bad.
 - C. The use of technology can have unintended consequences.
 - D. The use of technology affects humans in various ways, including their safety, comfort, choices, and attitudes about technology's development and use.



Real websites vs. Scam websites

| Scam Website | Both Websites | Real Websites |
|--------------|---------------|---------------|
| | | |

Directions: Below are examples of two different kinds of phishing emails. Read both emails with a partner and underline all warning signs that give you clues that the email is a scam. Then summarize your annotations in the space below each email!

From: account@notice-access1a7f389.com

To: me

Subject: Please update your payment information

Subject: Updated Payment Info Needed ASAP

Dear valued customer,

We were unable to validate you're billing information for the next billing cycle of you're membership so we will have to suspend your membership if we do not receive a response from you within 36 hours to verify your account and billing information.

All you have to do to restart membership is [click here](#) to update your password and billing details and then you will be able to continue to enjoy all of you're favorite movies and television shows without any more additional interruption.

Click below to restart [you're](#) membership and verify you're billing information ASAP.

Restart Membership

Remember: We're here if you need it! Contact us if you need more info.

Questions? [Contact us](#). This account email has been sent to you as part of your membership. To change your email preferences and update your password, log into your account.

What warning signs did you notice in this email?

From: John Smith

To: me

Subject: Happy bday!!!!

Dear friend,

I have been trying to get in touch with you to send you your virtual birth-day card but I havent been able to reach you!!! It is vary important that you click [here](#) to take a look at what I have been trying to send you The link will expiire today so it is impportant that you look at it now!!

You will not regret this!

from John

What warning signs did you notice in this email?
