

Using Email, Lesson 7: Spam and Phishing

| Northstar Digital Literacy Standards <i>This lesson aligns with the following standard/s.</i> | Vocabulary <i>This lesson focuses on the following digital literacy terms.</i> |
|---|--|
| <p>10. Manage email: Delete and retrieve messages, identify spam, and unsubscribe from unwanted mailing lists.</p> <p>12. Use caution when opening or replying to an email from an unfamiliar source, downloading attachments, following links, or giving out personal information.</p> | <p>hover</p> <p>phishing</p> <p>reputable</p> <p>spam</p> <p>suspicious</p> <p>virus</p> |

| Technology Concepts <i>Important lesson background and teaching tips for instructors</i> |
|--|
| <p>In this lesson, learners will practice recognizing the features of suspicious emails, including spam emails, phishing attempts, and emails that may include viruses. Learners will identify strategies for managing spam emails including moving them to the spam folder.</p> <p>Teaching Tips:</p> <ul style="list-style-type: none"> • To show learners additional examples of spam or phishing emails, try checking your own spam folder or doing an internet search for 'spam/phishing email examples' (check before class - some emails may not be classroom appropriate). • The spam folder may be referred to as a 'junk folder' depending on the email provider being used. |

| Teacher Prep Guide <i>Follow these steps to prepare for teaching this lesson</i> | |
|--|---|
| General Prep | <ul style="list-style-type: none"> <input type="checkbox"/> Open and log in to an email account to project for the class. <input type="checkbox"/> Prepare to project Reference A for Model & Explain 1, Reference B and Reference C for Model & Explain 2, and Reference D for Pair Explore. |
| Task | <ul style="list-style-type: none"> <input type="checkbox"/> Copy Handout A for each learner. <input type="checkbox"/> Copy Handout B for each learner (two pages). |
| Vocabulary Work | <ul style="list-style-type: none"> <input type="checkbox"/> Copy Handout C for each learner. |

Warm Up

Find out what learners know and prime them for the work ahead.

Pair/Small Group Work (Think-Pair-Share):

- Give two minutes to think about questions projected on screen, then discuss in pairs for two minutes, and finally share together as a class.
 - ◆ How do you keep information like credit card or social security numbers safe?
 - ◆ How do you decide if a business is **reputable** (good or bad)?
 - ◆ What can you do to prevent theft?

We will Learn...

Sharing learner friendly objectives helps set goals for today's learning.

List objectives on board or project. Read through them together to set goals for today's learning.

We will learn to:

recognize signs of a **suspicious** (untrustworthy) emails that could be trying to steal personal information.

identify signs of emails that may have **viruses**.

delete emails from untrustworthy sources.

MODEL & EXPLAIN 1

Teacher models and explains (thinks aloud) to complete a digital literacy task while learners observe. To help learners focus on the demonstration, they should not work on their own computers at this time.

Identifying Spam

- Say to learners:
 - ◆ “When you have an email account, you may get lots of emails from advertisers. These emails are called **spam**.”
 - ◆ “Many of these emails come from sources that are not **reputable**.”
 - ◆ “**Reputable** means the email is from a person or business you can trust.”
 - ◆ “It is important to recognize **spam**. **Spam** emails can have **viruses**. A **virus** is a kind of software that can hurt your computer. Some **spam** emails will try to steal your money or give your computer a **virus**.”
- Project [Reference A](#).
- Say to learners, while referring to [Reference A](#).
 - ◆ “**Spam** emails often sell similar products. **Spam** emails often advertise medicines, dating websites, amazing jobs with high pay, college degrees, weight loss, diets, money rewards, or casinos.”

- ◆ “Spam emails often have lots of capital letters, exclamation marks, and spelling mistakes.”
- ◆ “Some spam emails have attachments.”
- ◆ “They will advertise big discounts and cheap prices.”

→ Ask learners:

- ◆ “What common spam email clues do you see in the examples on [Reference A](#)?”

Managing Spam

→ Say to learners:

- ◆ “Email accounts have folders for different messages including folders for emails you have sent, email drafts you are working on, and deleted email messages. Email accounts also have a folder for spam messages (sometimes called the junk folder).”

→ Project and show learners the spam folder. Say to learners:

- ◆ “Usually, your email account puts spam email here.”
- ◆ “If you find spam in your inbox, you can move it to the spam folder.”

→ Project and model how to move spam into the spam folder:

- ◆ Select an email.
- ◆ Click ‘report spam’ (the button has an exclamation mark).

→ Say to learners:

- ◆ “Sometimes, your email account accidentally puts important emails in the spam folder. If you can’t find an important email, be sure to check the spam folder.”

DO IT TOGETHER 1

Teacher asks the class to restate the steps to complete the digital literacy skill modeled. This time, the teacher prompts with questions to learners.

- Ask learners the following questions. Have learners discuss in pairs first. Then, share answers as a class.
 - ◆ “What are some things spam emails may sell?” (weight loss, degrees, great jobs, drugs, dating websites, etc.)
 - ◆ “What can you do with spam emails? (move them to the spam folder, delete them).”
- Project page two of [Reference A](#).
- As a class, read through each email subject. Ask learners:
 - ◆ “Is this email spam? Is it reputable?”
 - ◆ “How do you know?”
 - ◆ “What common spam email clues do you see?”

MODEL & EXPLAIN 2

Teacher models and explains (thinks aloud) to complete a digital literacy task while learners observe. To help learners focus on the demonstration, they should not work on their own computers at this time.

Phishing

→ Say to learners:

- ◆ “You may get an email that looks like it’s from a **reputable** website (like Netflix, Facebook, or your bank) and it might ask you for private information like a password or credit card number. However, the email is actually from a thief, and not from Netflix or Facebook. This is called **phishing**, because the thief is *fishing* for your private information.”

→ Project example **phishing** emails on [Reference B](#).

Recognizing Phishing

→ Say to learners:

- ◆ “**Phishing** emails look like emails from important people or organizations like your bank, Amazon, Facebook, or Gmail. However, there are things about them that are **suspicious**. **Suspicious** means something looks bad or seems untrustworthy.”
- ◆ “Here are some clues that might make an email **suspicious**:
 - The email doesn’t have your name; it only says ‘Dear customer’.”
 - There are spelling and grammar mistakes.”
 - The email asks you to email important information, like your password or phone number.”
 - The email is from a company you don’t use.”

→ Say to learners:

- ◆ “If you click on the links in **phishing** emails, they will not send you to the real website. They will send you to a fake website that will steal your information or give your computer a **virus**.”

→ Project [Reference C](#) and say to learners:

- ◆ “**Phishing** thieves can make links that look like they go to a **reputable** website. These sites may look **reputable**, but if you click the link they often bring you to a different website. That website might be bad.”

→ Click on the link [Reference C](#).

→ Say to learners:

- ◆ “Luckily there are ways to see if a website link is **reputable**. You can find out what website a link goes to without clicking on it. When you **hover** your mouse over a link, the real web address or email address will appear. **Hover** means to move your mouse over something without clicking it.”

→ Project and **hover** over the links on [Reference C](#). The real addresses should appear.

Dealing with Phishing

→ Say to learners:

- ◆ “If you do get a **suspicious** email from a company or service (like Amazon, Facebook, your bank) don’t click anything. Instead follow these steps:
 - 1) Go to the real website, like Amazon’s real website.”
 - 2) Log in to your account.”
 - 3) If there’s a problem, the company will tell you in your account. If there isn’t a problem, delete the email.”

DO IT TOGETHER 2

Teacher asks the class to restate the steps to complete the digital literacy skill modeled. This time, the teacher prompts with questions to learners.

- Ask learners the following questions. Have learners discuss in pairs first. Then, share answers as a class.
 - ◆ “What will **suspicious** emails ask for?” (credit card info, passwords, etc.)
 - ◆ “What are some clues to help you recognize a **suspicious** email?” (no name, spelling mistakes, asks for important information)
 - ◆ “What should you do if you get a **suspicious** email?” (do not click links, delete the email, check the authentic website)

PAIR EXPLORE

Teacher has modeled the skills, and skills have been practiced together. Now, allow learners time to explore these skills with a partner *without step-by-step guidance from the teacher*. *Refer to the “How to Facilitate Pair Explore” for teacher support.

- Project [Reference D](#). With a partner, learners try to do the following:
 1. Log in to one email account.
 2. Look for **spam** or **phishing** emails in the inbox but **DO NOT OPEN THEM**.
 3. Look in the **spam folder**.
 4. If you find any, share with the people next to you.
 5. Find the “Report **Spam**” button.

Task 1

Learners practice skills by completing an authentic task/s.

- Give learners [Handout A](#).
- Review Common Clues to Help you Identify **Spam** Emails.
- Learners read the email subjects and put a checkmark next to **spam** emails.
- Review first two email subjects as a class. Then, learners finish on their own.
- Review answers and rationale as a class. Refer to [answer key](#), if necessary.

Task 2

Learners practice skills by completing an authentic task/s.

- Give learners [Handout B](#).
- Learners read the emails and decide if they are **suspicious** or not.
- Review first email as a class. Then, learners finish on their own.
- Review answers and rationale as a class.
- Answers:
 1. Not **suspicious**
 2. **Suspicious**
 3. Not **suspicious**
 4. Not **suspicious**

5. Suspicious
6. Suspicious

Vocabulary Work

Learners practice vocabulary presented within the lesson.

- Give learners [Handout C](#).
- Learners complete the sentences using their own words.
- Suggested answers (consider writing on the board if learners need additional support):
 1. "...medicines, college degrees, high-paying jobs, etc."
 2. "...passwords, credit card information, social security number, etc."
 3. "...bad or untrustworthy."
 4. "...hurt your computer."
 5. "...trust."
 6. "...move your mouse over something without clicking it."

Wrap-Up

A final check in with learners. An opportunity to review, reflect, or check for understanding.

- Ask learners the following questions. Learners discuss in pairs before sharing answers as a class:
 - ◆ "What clues help you know if an email is **spam**? (all capital letters, spelling mistakes, great deals)"
 - ◆ "What should you do with **spam** email?" (select email and click 'Report **Spam**' or delete it)"
 - ◆ "What are some clues an email is a **phishing** email?" (asks for valuable information, no name, spelling mistakes)"
 - ◆ "What should you do with **phishing** emails?" (delete them, verify if there's a problem with your accounts by going to the real website, i.e. Facebook or Amazon)"

Spam Examples

Directions: Read the list of common clues to help identify spam email.

| Common Clues to Help You Identify Spam Emails |
|--|
| <ul style="list-style-type: none">● Trying to sell things like: medicines, dating websites, amazing jobs with high pay, college degrees, weight loss, diets, money rewards, or casinos.● CAPITAL LETTERS, Exclamation marks!!!, and spelling mistakes● Spam email sometimes have attachments (look for a paperclip icon (📎))● Big discounts, cheap prices |

Directions: Read the email subjects below. What common spam email clues do you see?

Spam Examples

| |
|--|
| KETO MIRACLE: Lose 20 pounds in one week! - This amazing new diet will inc... |
| 50% all Microsoft Office Products - Word, Powerpoint, Excel, other software at an |
| Get College Degrees at HOME! - get your BA, BS, PHD, Masters from home with thi |
| YOU JUST WON \$1 MILLION! - Click here now to retrieve your reward. This is... 📎 |
| 60% of prescription drugs TODAY ONLY - get Lip1tor, Zoloft, Ambien right he... |

Reference A (page two)

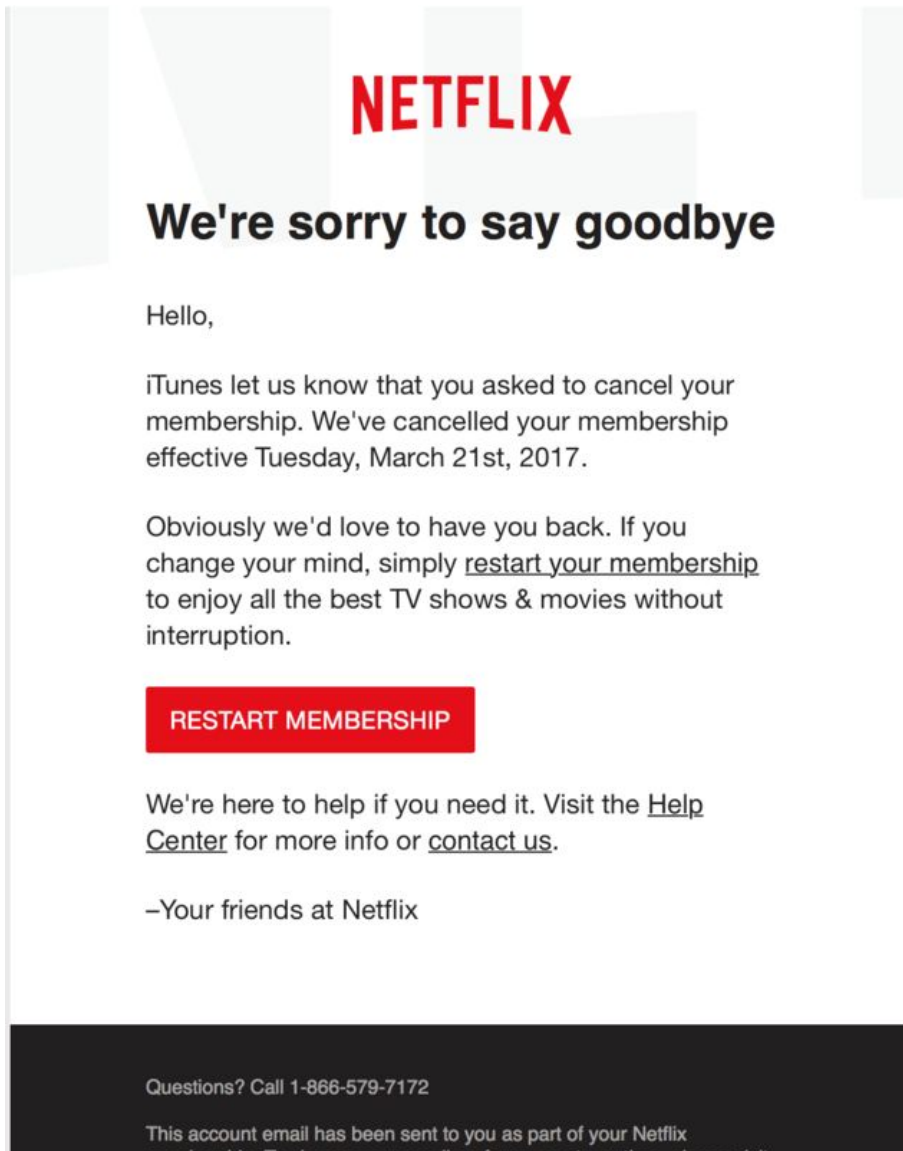
Spam Examples (continued)

*Directions: Read the email subjects. Are these emails **spam**? Which emails look **reputable**? What common **spam** email clues do you see?*

| Sender | Subject |
|------------------|--------------------------------------|
| Work home! | Make \$100,000 by working at home!!! |
| Teacher Lee | Class tomorrow |
| Kansas Job Board | Kansas City Job Fair |
| Cheap computers | 65% COMPUTERS, laptops, tablats! |
| Stefan | Lunch Wednesday? |
| Netflix | New login to your account |

Suspicious Emails

Directions: How do you know these are **phishing** emails? Point out the clues.

A screenshot of an email from Netflix. The email has a white background with a large red 'NETFLIX' logo at the top. Below the logo, the text reads: 'We're sorry to say goodbye', 'Hello,', 'iTunes let us know that you asked to cancel your membership. We've cancelled your membership effective Tuesday, March 21st, 2017.', 'Obviously we'd love to have you back. If you change your mind, simply restart your membership to enjoy all the best TV shows & movies without interruption.', a red button with the text 'RESTART MEMBERSHIP', 'We're here to help if you need it. Visit the Help Center for more info or contact us.', and '-Your friends at Netflix'. At the bottom, there is a dark grey footer with the text: 'Questions? Call 1-866-579-7172' and 'This account email has been sent to you as part of your Netflix membership. To help protect your privacy, we have redacted some information.'

NETFLIX

We're sorry to say goodbye

Hello,

iTunes let us know that you asked to cancel your membership. We've cancelled your membership effective Tuesday, March 21st, 2017.

Obviously we'd love to have you back. If you change your mind, simply restart your membership to enjoy all the best TV shows & movies without interruption.

RESTART MEMBERSHIP

We're here to help if you need it. Visit the Help Center for more info or contact us.

-Your friends at Netflix

Questions? Call 1-866-579-7172

This account email has been sent to you as part of your Netflix membership. To help protect your privacy, we have redacted some information.

Reference B (page 2)

Exclusively for: | VALUED CUSTOMER
Online Banking



 **Your Bank of America accounts has been locked!**

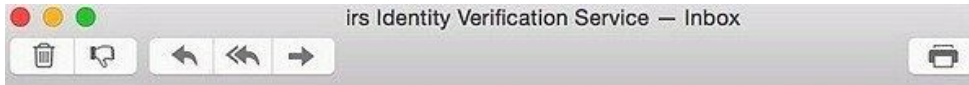
There are a number of invalid login attempts on your account. We had to believe that, there might be some security problems on your account. So we have decided to put an extra verification process to ensure your identity and your account security.

Please [click here](#) to continue the verification process and ensure your account security.



Email Preferences

This is a service email from Bank of America. Please note that you may receive service email in accordance with your



irs gov @
To: @kaspersky.com
irs Identity Verification Service

Today at 5:02 AM



Dear Tax Payer,

This is an automated email, please do not reply.

We've notice your account information is missing or incorrect.
We need to verify your account information to file your Tax Refund.
Please follow [this link](#) to verify your information.

Thanks,

IRS Team
2016 IRS All right reserved.

IMPORTANT NOTE: If you receive this message in spam or junk it is a result of your network provider. Please move this message to your inbox and follow the instruction above.



Reference C

Bad Links

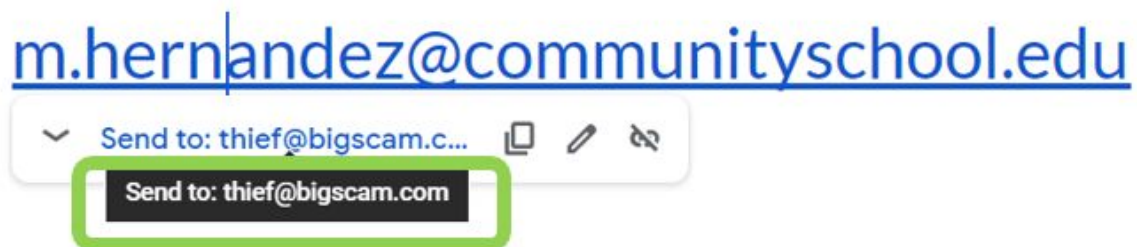
Directions: Click on the link below. Does it go to the website it says it does?

www.facebook.com

Directions: Hover your mouse over the email below. Is the email address that appears the same?

m.hernandez@communityschool.edu

If you hover your mouse, you can see the real address the link goes to:



Pair Explore

Directions: Complete the following with a partner on one computer.

1. Log in to one email account.
2. Look for **spam** or **phishing** emails in the inbox but
DO NOT OPEN THEM.
3. Look in the **spam folder**.
4. If you find any, share with the people next to you.
5. Find the “Report **Spam**” button.

Handout A

Spam Practice

Directions: Read the email subjects. Put a checkmark (✓) next to the spam emails. What clues help you know the email could be spam?

| Common Clues to Help you Identify Spam Emails |
|---|
| <ul style="list-style-type: none">• Trying to sell things like: medicines, dating websites, amazing jobs with high pay, college degrees, weight loss, diets, money rewards, or casinos.• CAPITAL LETTERS, Exclamation marks!!!, and spelling mistakes• Spam email <u>sometimes</u> have attachments (look for a paperclip icon (📎))• Big discounts, cheap prices |

| From | Subject | Spam? |
|-----------------|---|-------|
| GET.RICH | Make 20,000 A WEEK from HOME!! click here | |
| Amazon | Your order #1354453 has shipped | |
| Fairvale School | Class Cancellations | |
| Skinny now | LOSE 10 POUNDS IN TWO WEEKS! 50% special pill | |
| Hot Date | Meet Attractive Beautiful Singles in your Area! | |
| Rosa | Vacation photos from Florida! | |
| Rent Help now | 60% your rent now with this trick! | |
| PharmaFree | Huge Discounts on Pills, Lipitor, Prilosec | |
| Facebook | Hassan Ahmed commented on your photo | |
| Gmail | New login to your account | |
| Cheap office | Microsoft word, Photoshop, Windows 65% off | |
| Degrees online | Get your M.#. pHD from home NO cost | |
| Library | Used book sale Monday | |

Handout A (answers)

Spam Practice

Directions: Read the email subjects. Put a checkmark (✓) next to the spam emails. What clues help you know the email could be spam?

| From | Subject | Spam? |
|-----------------|---|-------|
| GET.RICH | Make 20,000 A WEEK from HOME!! click here | ✓ |
| Amazon | Your order #1354453 has shipped | |
| Fairvale School | Class Cancellations | |
| Skinny now | LOSE 10 POUNDS IN TWO WEEKS! 50% special pill | ✓ |
| Hot Date | Meet Attractive Beautiful Singles in your Area! | ✓ |
| Rosa | Vacation photos from Florida! | |
| Rent Help now | 60% your rent now with this trick! | ✓ |
| PharmaFree | Huge Discounts on Pills, Lipitor, Prilosec | ✓ |
| Facebook | Hassan Ahmed commented on your photo | |
| Gmail | New login to your account | |
| Cheap office | Microsoft word, Photoshop, Windows 65% off | ✓ |
| Degrees online | Get your M.#. pHD from home NO cost | ✓ |
| Library | Used book sale Monday | |

Handout B

Phishing Practice

*Directions: Read each email. Decide if it is **suspicious**.*

Email 1

| |
|---|
| From: Jose Salvador |
| Subject: Project meeting |
| Hi Ron, I was wondering - what time can we meet to discuss next week's project? I'm free Tuesday and Wednesday. -Jose |
| Is this email suspicious? I think this email is _____ because _____. |

Email 2

| |
|--|
| From: Facebookteam.com |
| Subject: URGENT Account Locked Security breach |
| Dear Facebook user, We have recieved Notification that someone is trying to hack youre account. Please reply to this email at customerservice@facebookteam.com with your username and password in order to secure your account. Thank you, Facebook |
| Is this email suspicious? I think this email is _____ because _____. |

Email 3

| |
|---|
| From: Amazon |
| Subject: Your credit card did not work |
| Dear Rosana, Your last order #1235345433 was not processed because your credit card was expired. Please visit amazon.com to update your credit card in order to process your order. Thank you from Amazon.com |
| Is this email suspicious? I think this email is _____ because _____. |

Handout B (page 2)

Email 4

| |
|--|
| From: Mohammed Hassan |
| Subject: Class cancelled today |
| Hello class, Today's class will be cancelled due to bad weather. I hope you all stay safe today! Thanks, Mohammed |
| Is this email suspicious? I think this email is _____ because _____. |

Email 5

| |
|--|
| From: US Bank |
| Subject: Your Accounts has been locked! |
| An error was detected in your informations so your account has been temporarily locked for your security. We need you to update your informations such as credit card info immediately. Please click below to update your informations. |
| Is this email suspicious? I think this email is _____ because _____. |

Email 6

| |
|---|
| From: FirstBank Credit Card |
| Subject: Your statement is available |
| Dear Sam, This is an email to let you know that your latest bank statement is available. A copy can be downloaded if you visit our website at firstbankcredit.com . Sincerely, FirstBank Team |
| Is this email suspicious? I think this email is _____ because _____. |

Handout C

Spam and Phishing

Directions: Complete the vocabulary definitions using your own words.

1. **Spam** emails frequently sell things like _____
_____.
2. A **phishing** email will ask you for your _____
_____.
3. Something **suspicious** is something that seems _____.
4. A **virus** is a kind of software that can _____.
5. A **reputable** business is a business that you can _____.
6. You can **hover** your mouse over a link to see the **web address** or **email address** the link goes to. **Hover** means _____
_____.