# Surf the Internet Securely

# **1. Create Strong Passwords to Increase Online Security**

## 1.1 Welcome



Notes:

Welcome to Surf the Internet Securely.

### 1.2 Learning Objectives



#### Notes:

In this learning activity, you will:

- Apply Internet security and personal safety guidelines
- Examine elements of strong and weak passwords and techniques used to create passwords
- Demonstrate the steps involved in securely logging in and logging out of an application

### 1.3 Introduction



#### Notes:

By the end of this activity, you'll be able to:

- Securely log in and out of a website or application
- Differentiate between weak passwords and strong passwords
- Create strong passwords
- Determine if an application is secure before you log in
- Learn how to log out

### 1.4 Your Safety & Internet Security



#### Notes:

The Internet is a great resource and it has changed the way we work, communicate, and socialize. However, there are risks associated with surfing the Internet. Everything we do online is not guaranteed to be kept private. Today, we'll go over some guidelines to help you manage your online privacy risks.

At the end of the day, your online security is only as strong as you choose to make it. For any website, email service, or other application you use, read and use their privacy settings and security controls. Knowing what the service can do for you and what you need to do for yourself puts you in control of your online security.

### **1.5 Online Accounts**

(Es)	amazon	
	Sign in Email or mobile phone number	Username
	Password Forgot your password?	Password
	Sign in	
	New to Amazon?	
	By signing in you are agreeing to our Conditions of Use and Sale and our Privacy Notice.	

#### Notes:

Online accounts protect your personal information because they require a username and password. These accounts are designed to prevent other people from seeing your last Amazon order, your checking account balance, and the tickets you bought to the Justin Bieber concert. No matter the website or application, you're required to protect your privacy by setting up an online account with a username and password.

A username is how the application identifies you. Your password is how you identify the account belongs to you. These work in tandem to protect your online identity and privacy.

### 1.6 Passwords

Passwords	Glossary 1.6
Passwords	Glossary 1.6 A password is a sequence of characters used to gain access to your account.
From the test       Image: Control         Privac & Terms       Image: Control         REGISTER       By clocking: "REDISTER"; / agrees to the NPL com Privacy Policy and Terms of Service	

#### Notes:

Every time you create an online account you'll be asked for a username and password. A *password* is a sequence of characters used to gain access to your account. It's how your account knows it's you and not someone else accessing your personal information.

Notice the definition specifies *characters* instead of just letters. Your password can, and should, include letters, numbers, and symbols.

Most people use passwords to log into computers, phones, and Web accounts.

Also, you shouldn't use the same password for every online account. If you've used the same password for every account so far and you're unsure how to create and remember a variety of new ones, don't worry - we'll teach you some easy to use tricks for creating strong and unique passwords.

### 1.7 How Are Passwords Used?

How are P	Passwords Used?		Glossary	1.7
	Reg	jister		
Create a Nev	w Wisc-Online Account	Or Log In With So	ocial Media	
User Name		TWITTER	FACEBOOK	
Display Name	•	E	f	
First Name				
Last Name		GOOGLE	LINKED IN	
Email Address		G	in	
Password	IXLR82			
Confirm Password				
	Register			

#### Notes:

Passwords are created by the user every time a new account is established.

When creating an online account, sometimes a temporary password is assigned and shared with you through a secure email. Other times you'll be required to create your own password. When you're assigned a password, you'll need to change it after the first time you log into the new account.

There are many ways to create passwords, but it's critical to keep the password to yourself. Don't share it with anyone else.

### 1.8 Passwords - Weak

Passwords - Weak	Glossary 1.8
Weak Passwords	Weak Password Examples
<ul> <li>Common words or phrases</li> </ul>	password
<ul> <li>Dictionary words</li> </ul>	drowssap
Your name	123456
All lowercase letters	changeme
	asdf
Only numbers	iloveyou
	default
	062975
	blank

#### Notes:

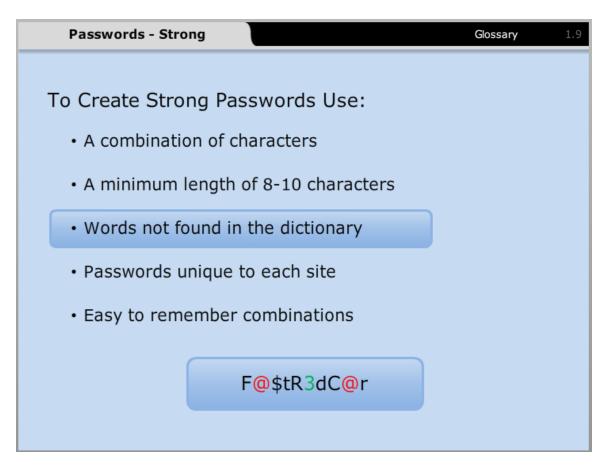
Technically, passwords can be any combination of case-sensitive letters, numbers, special characters, and symbols.

Weak passwords contain common words or phrases, dictionary words, your name, all lowercase letters, or only numbers. The word password is the most commonly used weak password. Other examples include:

- drowssap ('password' spelled backwards)
- 123456
- changeme
- asdf
- iloveyou
- default
- 062975 (your birthday)
- blank

These passwords are considered weak because they're easy for anyone to guess, including hackers who'd like access to your accounts.

### 1.9 Passwords - Strong



#### Notes:

To create strong passwords, use a combination of characters, a minimum length of 8-10 characters, words not found in the dictionary, and keep passwords unique to each site and easy to remember. That's quite the list. Let's examine each one of these concepts to help you understand why they're important.

Strong passwords typically contain a combination of upper-case and lower-case letters, numbers, and symbols such as \$, @, &, etc.

Strong passwords also contain a minimum of 8-10 characters. The more characters you add, the stronger your password becomes. It's not uncommon for some organizations to require passwords between 12 and 16 characters.

In addition to characters and length, strong passwords don't contain common dictionary words or ordinary combinations of dictionary words.

For example, using the password: 'FastRedCar' isn't very secure because it contains a string of dictionary words commonly found together.

Adding symbols and numbers to this password makes it more secure. For example, changing 'FastRedCar' to 'F@\$tR3dC@r' using some symbols, improves its strength. We've substituted the @ symbol for the letter a and the number 3 for the letter e. These are good tricks to use when creating strong passwords but you can still do more.

### 1.10 Tips: Create Strong Passwords



#### Notes:

In order to come up with a strong and usable password, it needs to be easy to remember. It doesn't help to create a strong password if you'll never remember it.

One method is to think of something from your past and use it to create a strong password.

For example,

"My first job was at a gas station where I made four dollars per hour."

You can abbreviate the words in this sentence to create a strong password that looks like this à Mfjw@agswIm\$4ph. You've used the first letter from each word, substituted the @ symbol for the word at, and inserted the dollar sign before your wage. At 16 characters, this password is memorable to you but almost impossible for a hacker to crack.

You can also use song lyrics, popular sayings and phrases, and opening lines from your favorite book to create these abbreviations.

Other examples of strong passwords are:

- D0g\$@ndC@t5 (Dogs and cats)
- ADI8&a\$s (A day late and a dollar short)

# 1.11 Practice Creating Strong Passwords

Practice	Glossary	1.12
You're choosing your password for an online Pick the strongest password:	retailer.	
<ul> <li>12345678</li> <li>Abcdefg</li> </ul>		
<ul> <li>ThisisMyPassword</li> <li>NESW15973*/*</li> </ul>		

#### Notes:

You're choosing your password for an online retailer.

Pick the strongest password.

# **1.12** Practice Creating Strong Passwords

Practice Glossary	1.12
You're choosing your password for your school's LMS. Wha are some recommendations for creating strong passwords (Select all that apply.)	
Use upper and lower case letters	
Keep it simple	
Abbreviate a phrase, song lyric, or memory	
Use at least 8-10 characters	

#### Notes:

Select the correct answers.

You're choosing your password for your school's LMS. What are some recommendations for creating strong passwords? (Select all that apply.)

# 2. Stay Safe Online

### 2.1 Minimize Personal Details

Minimize Personal Details Glossary 2	2.1
Before using these services, follow these rules:	
<ul> <li>Never give personal information online</li> </ul>	
<ul> <li>Only share information with those you trust</li> </ul>	
<ul> <li>Protect your account information</li> </ul>	
Safely store passwords	
<ul> <li>Set your phone, tablet, or computer to idle after a short period of time and require a password to unlock it</li> </ul>	
Use a password manager	
<ul> <li>Think before sharing, downloading, or opening anything</li> </ul>	

#### Notes:

The Internet has created a number of fantastic ways to connect with family and friends through social media websites and text, video, and voice chat services.

Programs like Skype and FaceTime allow you to video chat with anyone in the world. Online chat services allow you to chat with people who share similar interests and meet new friends.

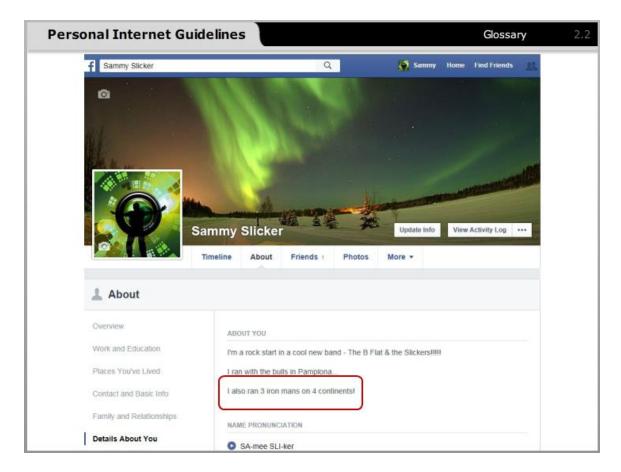
Be careful not to share too much information about yourself. Before using any of these services, learn and follow these rules.

- Never give personal information online.
- Only share information with those you trust
- Protect your account information

- Safely store passwords
- Set your phone, tablet, or computer to idle after a short period of time and require a password to unlock it
- Use a password manager
- Think before sharing, downloading, or opening anything

Let's examine these personal Internet safety guidelines in more detail.

## 2.2 Personal Internet Guidelines



#### Notes:

Never give personal information online. This includes your real name, address, phone number, other identifying details, and age. Keep this information behind a username and password. It's risky to share personal information in a Facebook post, chat, or blog.

Just as you wouldn't give out your personal information, don't believe everything you read in someone else's profile. Also, familiarize yourself with the safety features offered by the chatting software. Most have tools to block unwanted users or ignore inappropriate chatters.

### 2.3 Only Share With Trusted People



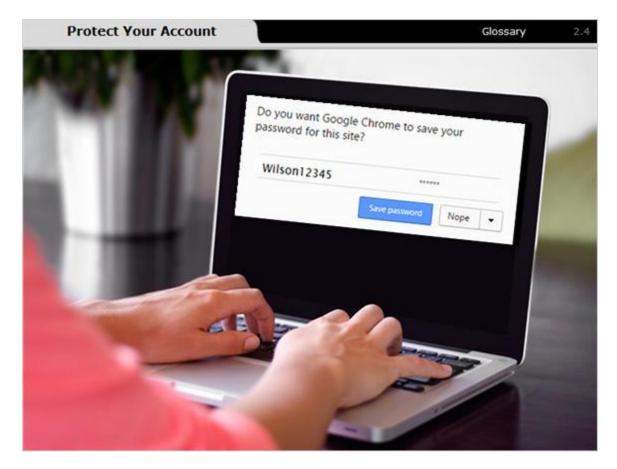
#### Notes:

Be cautious when providing your primary email address. Make sure you only share it with reputable people and companies.

Using your email address to sign up for raffles, online contests, and other promotional deals increases the likelihood of your email address being sold to a third party, which increases the amount of unwanted email or spam you receive and makes it difficult to manage your email account.

Never give your passwords out to anyone and change them every six months. Treat your email the same way you treat your safety deposit box. Just as you wouldn't give anyone the keys to your safety deposit box, don't give anyone the password that protects your email account.

### 2.4 Protect Your Account



#### Notes:

As you create new online accounts with usernames and passwords, your browser may ask if you'd like to save your username and password for the site.

Be careful how many usernames and passwords you save and for what sites you save them. Saving a username and password may pose a security risk if the site or the browser is ever hacked. Also, remember to only use this feature on a home computer. Never save your username or password on a shared computer such as the ones in an on-campus lab or job center.

### 2.5 Safely Store Passwords



#### Notes:

It's important to keep your account numbers, user IDs, and passwords secret and in a secure location.

If possible, it's best to remember passwords. If you need to write them down, be sure to keep them somewhere secure like in your purse or wallet.

Don't keep passwords out in the open or hide them in a conspicuous location such as the underneath your keyboard, your phone, or your mousepad. Don't post them on your monitor or leave them in a desk drawer. It won't matter how strong your passwords are if someone can see them on a piece of paper and copy them down.

## 2.6 Electronic Devices

Electronic Devices		Glossary 2.6
Image: constraint of the second o	<ul> <li>****** Verizon * 10:54 AM * 3: 87%</li> <li>General Auto-Lock</li> <li>30 Seconds</li> <li>1 Minute</li> <li>2 Minutes</li> <li>3 Minutes</li> <li>4 Minutes</li> <li>5 Minutes</li> <li>\$ Minutes</li> </ul>	

#### Notes:

Set your phone, tablet, or computer to idle after a short period of time and require a password to unlock it. Leaving yourself logged into a device for long periods of time increases the chance of someone else accessing your information.

Set a time limit. For instance, changing the settings under General to auto-locking after five minutes of idleness on your iPhone or iPad requires a password to unlock the device. The procedure is similar for an Android phone.

The time frame can be shorter or longer depending on your personal usage, but devices should never be logged in and open for extended periods of time.

### 2.7 Use a Password Manager

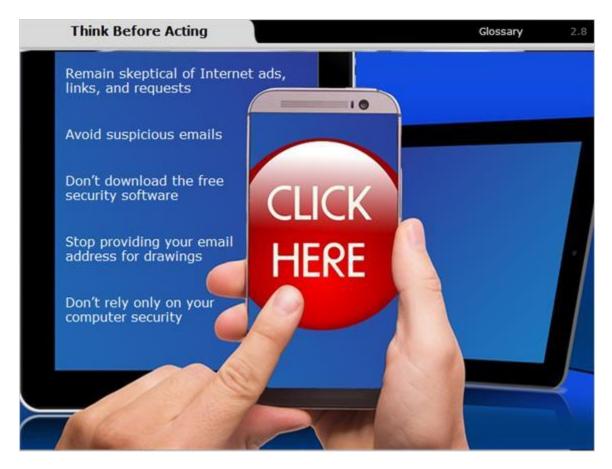
Use a Password Manager	Glossary 2.7
Dashlane	
Password Keeper	
LastPass 3.0	
Password *********	Password *********

#### Notes:

There are many applications available today - some free of charge - to save passwords. Dashlane, Password Keeper, and LastPass 3.0 are all examples of programs designed to safely house and remember every password you use.

These programs make it easy to create complex passwords, which improves your online security. They also make it easy to remember which password you've used for which site, by storing them in one place.

### 2.8 Think Before Acting

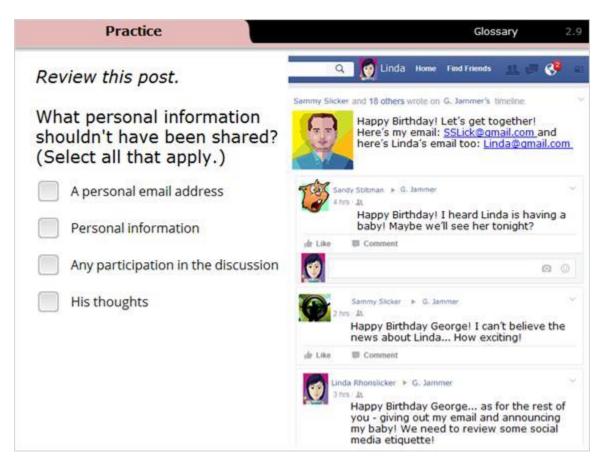


#### Notes:

You are the final layer of security. You can use the best password manager, have strong and unique passwords for each and every website you visit, and keep all of your information secure, but making bad security decisions overrides every good decision you've made.

Remain skeptical of all Internet ads, links, and requests. Avoid the email link from the Nigerian prince promising you a million dollars. Don't download the free security software. Stop providing your email address to every free drawing and giveaway. Don't fall into the trap of believing that your computer's security software protects you from bad decisions.

### 2.9 Practice Guidelines



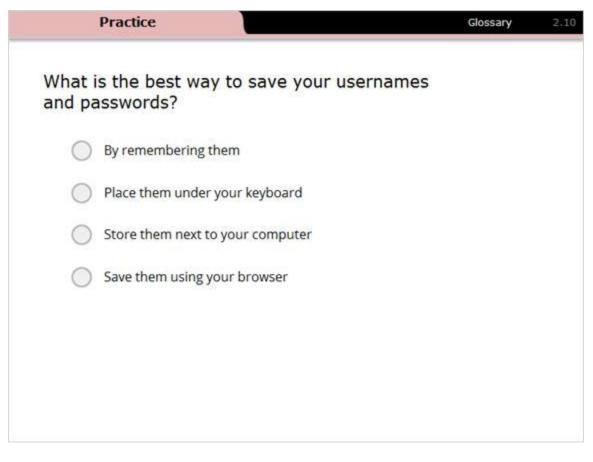
#### Notes:

Review this post.

What personal information shouldn't have been shared?

(Select all that apply.)

### 2.10 Practice Passwords



#### Notes:

Select the correct answer.

What is the best way to save your usernames and passwords?

# 3. Logging In and Out To Stay Secure

### 3.1 Logging In And Out Securely



#### Notes:

It's common for people to use multiple computers during their day-to-day activities. A person might have a computer at work, at school, and at home. In addition to using multiple computers, a person might also log into a variety of personal accounts while on those computers.

This is why it's important to securely log in and log out of any application, website, or computer, especially when working on public or shared computers. Let's examine some of the best practices for securely logging in and logging out.

## 3.2 Website Encryption

Web	site En	crypt	ion							Glossary		
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		ATM	18(22)(2015			er dining out	556.00		52,334.80			
		58	18/24/2815	The Phane Compar			523.00		\$5,311.00			
		Tetafa		Transaction court	C 5/		\$101.00	\$3,500.00	\$1.211.00			

#### Notes:

You log into a website using your username and password. Once you're logged in, you can place an order, check your saving's account balance, or register for classes. It's best to send information online only through encrypted websites. Banks, colleges, job centers, and many online retailers use encryption to keep their customer's information private.

To determine if the website is encrypted, look in your Web browser's address bar. If the letters before the website address are *https*, the website is encrypted, and the *s* stands for secure. Some websites won't show *https* until you're on the account information page. In addition to the *s*, you may also see a small padlock icon near the address bar.

If you don't see these indicators or if they're crossed out, carefully consider what information you are willing to provide to the website, because it may not be secure.

## 3.3 Logging Out of an Application

Logging Out of an Application	Glossary 3.3
Edit profile Account settings Sign out	Create Page Create Group Your Groups Create Ads
	Advertising on Facebook Activity Log News Feed Preferences Settings
<ul> <li>REGISTRATION STATUS</li> <li>ACCOUNT SETTINGS</li> <li>CONTACT US</li> </ul>	Log Out Help Support Inbox 2 Report a Problem
-I LOGOUT	

#### Notes:

It's important to log out of an application when you're finished using it, especially if you're on a public or shared computer. Most websites and applications have a logout or sign out option, where you can securely leave the application.

Logging out of an application prevents another person from accessing your account and personal information after you've left the computer.

Say you're using Blackboard to work on an assignment and you leave the computer lab without logging out of your account. The next person to sit down may be able to access your blackboard account, your classes, and your grades.

What if you've just checked your bank account balance? That person would also have access to your banking information. Every time you leave a shared or public computer you need to log out of your accounts. Many people find it easier to restart the computer or use the log off feature to ensure they've securely left every account.

Websites typically have a "log out," "sign out" or "log off" button somewhere in the upper-right hand corner of the screen. Clicking this button ensures your information is no longer available.

### 3.4 Practice



#### Notes:

You're logged into the Wisconsin TechConnect website.

Click to log out.

# 4. Review and Wrap-Up

### 4.1 Review and Wrap-Up

Review and	Wrap-Up Glossary	4.1
	Today we've covered: <ul> <li>What an online account is</li> </ul>	
	<ul> <li>How you access it with username / password</li> <li>A password is a sequence of characters used to gain access to online accounts</li> </ul>	
	<ul> <li>Strong passwords require:</li> <li>A combination of characters</li> <li>A minimum length of 8-10 characters</li> <li>Words not found in the dictionary</li> <li>Unique to each site and easy to remember</li> </ul>	
	Weak passwords <ul> <li>Dictionary words</li> <li>Numbers in a row</li> <li>Simple phrases like <i>iloveyou</i></li> </ul>	

#### Notes:

Today, we've gone over what an online account is and how you access it with a username and password. You learned that a password is a sequence of characters used to gain access to online accounts.

Strong passwords require a combination of characters, a minimum length of 8-10 characters, words not found in the dictionary, and are unique to each site and easy to remember. Weak passwords are dictionary words, numbers in a row, and simple phrases like iloveyou. You learned some tips for creating strong passwords and how these can improve your online security.

### 4.2 Review and Wrap-Up



#### Notes:

You were also introduced to ways to minimize your personal details to improve your Internet safety and security. The rules were:

- Never give personal information online
- Only share information with those you trust
- Protect your account information
- Safely store passwords
- Set your phone, tablet, or computer to idle after a short period of time and require a password to unlock it
- Use a password manager
- Think before sharing, downloading, or opening anything

Finally, you learned how to log into and out of a website or application securely. Now let's check your understanding by answering the following questions.

# 5. Check Your Knowledge

### 5.1 Multiple Response

Check Your Knowledge Glossary	5.1
You're setting up an Amazon account. What tips should you use to create your password? (Select all that apply.)	u
Use upper and lower case letters	
Keep it simple	
Use at least 8-10 characters	
Abbreviate a phrase, song lyric, or memory	
Make it as complicated as possible	

#### Notes:

Select the correct answers.

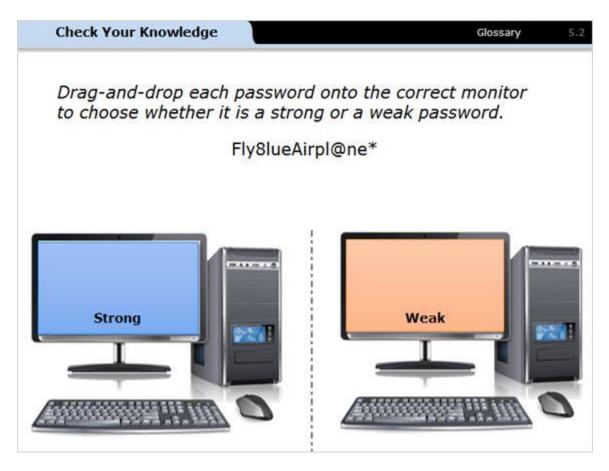
You're setting up an Amazon account. What tips should you use to create your password? (Select all that apply.)

### 5.2 Drag-and-Drop



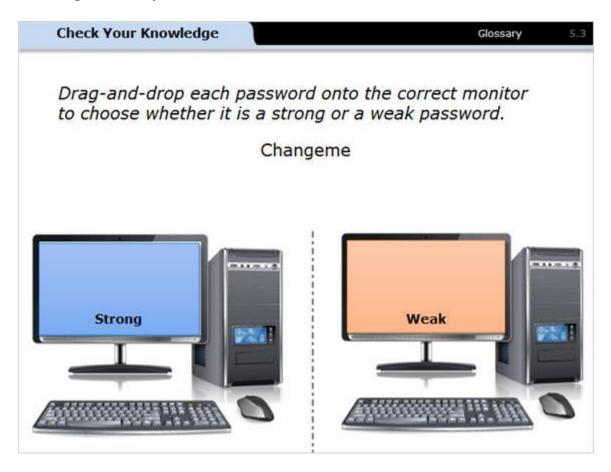
#### Notes:

### 5.3 Drag-and-Drop



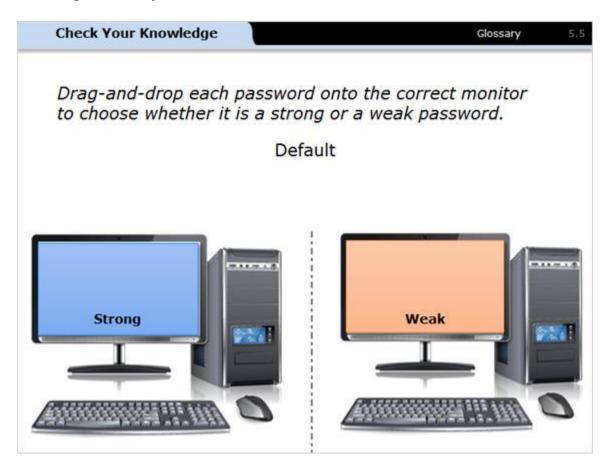
#### Notes:

### 5.4 Drag-and-Drop



#### Notes:

### 5.5 Drag-and-Drop



#### Notes:

### 5.6 Drag-and-Drop



#### Notes:

# 5.7 Multiple Choice

Check Your Knowledge	Glossary 5.7
What is one technique used to cre	ate a strong password?
Use your birthday	
Abbreviate a song lyric or memory	
Use a dictionary word	
Take out the spaces from common phr	ases

#### Notes:

Select the correct answer.

What is one technique used to create a strong password?

# 5.8 True/False

Check Your Knowledge		Glossary	
You should always s using Google Chrom			
O True			
False			
Do you want password fo	t Google Chrome to save y or this site?	your	
Wilson12	2345	•	
Wilson12	Save password	Nope 👻	

#### Notes:

True or False:

You should always save your password for websites using Google Chrome's automated service.

# 5.9 Identify

Check Your Knowledge		Glossary 5.9
	to-lock setting on this iPho es and requires a password	
	••••• Verizon      ▼ 10:54 AM      √	
	30 Seconds	
	1 Minute	
	2 Minutes 3 Minutes	
	4 Minutes	
	5 Minutes	
	Never 🗸	

#### Notes:

Identify the correct location.

Click to change the auto-lock setting on this iPhone so it goes to idle mode after two minutes and requires a password to unlock it.

## 5.10 Multiple Response

Check Your Knowledge	Glossary 5.10
You'd like to join the conversation a presentation. What information sho in your post? (Select all that apply.	ouldn't you include
<ul> <li>Your phone number</li> <li>Your reaction</li> <li>Your address</li> <li>Your opinion</li> </ul>	<image/> <text><text><text><text><text><text></text></text></text></text></text></text>

#### Notes:

Select the correct answers.

You'd like to join the conversation about this Ted-Ed presentation. What information shouldn't you include in your post? (Select all that apply.)

# 5.11 Multiple Response

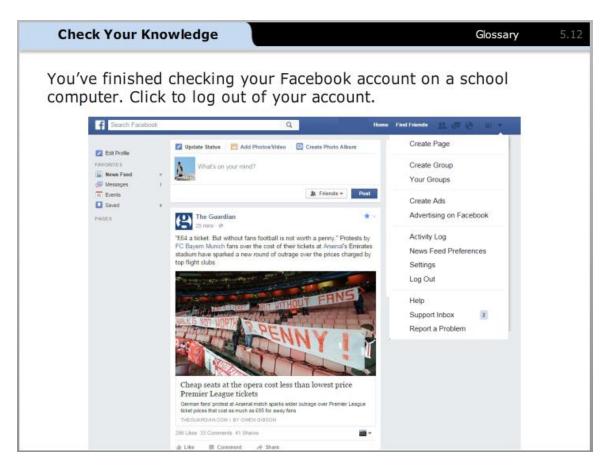
Check Your Knowledge	Glossary	5.11
How do you determine if a website (Select all that apply.)	is encrypted?	
Look for the "s" after http in the address	s bar	
Look for the "h" before ttps in the addre	ess bar	
Look for the padlock symbol		
Look for the line through the letters		

#### Notes:

Select the correct answers.

How do you determine if a website is encrypted? (Select all that apply.)

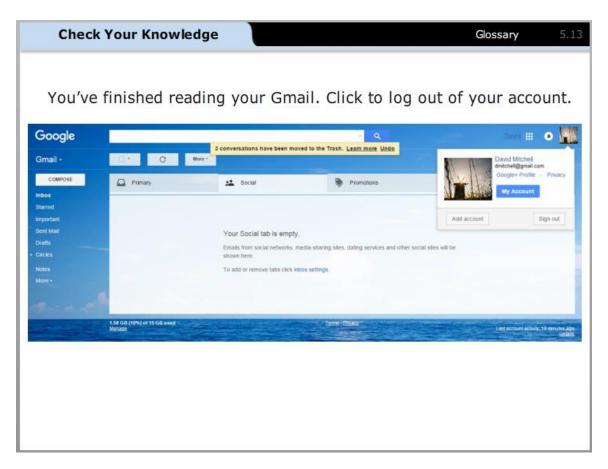
## 5.12 Identify



#### Notes:

You've finished checking your Facebook account on a school computer. Click to log out of your account.

# 5.13 Identify



#### Notes:

You've finished reading your Gmail. Click to log out of your account.

### 5.14 Multiple Choice

Che	eck Your Knowledge	Glossary	5.14
	y should you always log out of your accour ared or public computer?	nts on a	
0	So the next person doesn't have to close out applicat	ions	
0	So the next person doesn't have to log you out them	selves	
$\bigcirc$	So the next person can't get your personal information	n	
0	You don't have to log out - everything times out auto	omatically	

#### Notes:

Select the correct answer.

Why should you always log out of your accounts on a shared or public computer?

# 6. Conclusion

### 6.1 Conclusion



#### Notes:

Congratulations. You've completed: *Surf the Internet Securely*.

Use your mouse to click on the restart button if you'd like to repeat this module.