

Internet Safety and Cybersecurity

Textbook

Internet Safety and Cybersecurity



Introduction

The internet is like a very big library or a huge park. There are many amazing things to find and learn, but just like in a real place, there are some areas you should be careful about. When you are playing games, looking things up, or sending messages, it's important to know how to protect yourself. Let's learn how to be smart and safe when using computers and the internet!

It's important to use a computer safely. This helps to protect your information and your family from problems like viruses or people who might try to get your information without permission. Since the internet connects people all over the world, there are steps to follow to make sure you stay safe.

Simple Steps to Stay Safe

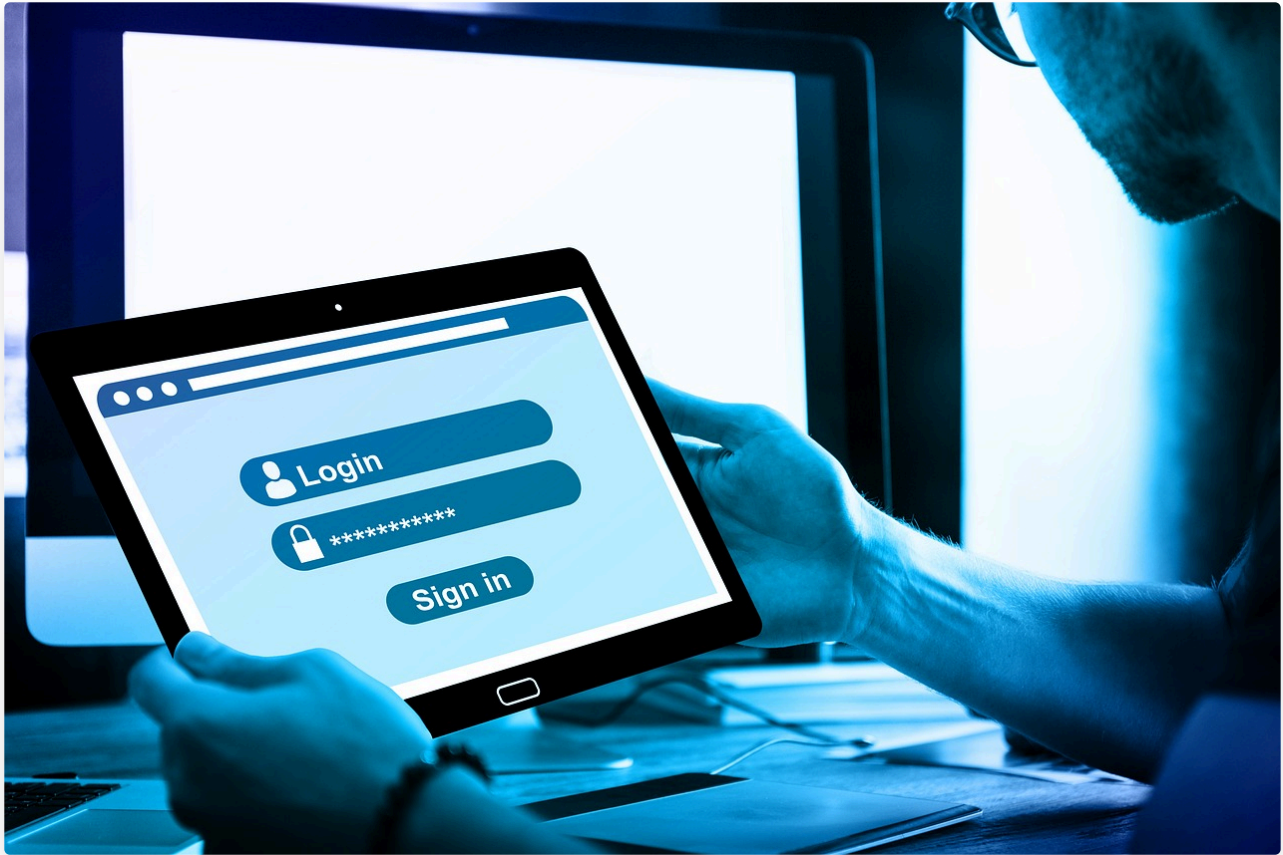
These easy steps can help you stay safe while using the computer.

Password Safety

You will use many different passwords as you get older. It's important to start making strong passwords now. Simple passwords are easy for other people to guess. If someone else knows your password, they can get into your account. This can be a problem, so it's important for your passwords to be strong.

Suggestions for making a strong password:

- Use a mix of numbers and letters.
- Use both small (lowercase) and big (uppercase) letters.
- Make your password long, at least 8 characters.



Don't Share Personal Information

When you share information about yourself on the internet, that information could be seen by people you don't know. Sharing things like your full name, names of family members, or your home address are especially risky to put online. Keep your personal information private by not sharing too much online.

Log in AND Log out

Logging in helps you get to your own account. This helps keep your work safe and private. Use your strong password to log into your account. This also helps you keep your work in one place so you can find it later.

Logging out is also very important. If you forget to log out of a school computer, the next person to use it might be able to get into your account. They could change or delete your work. To protect your work, always remember to log out every time you finish using a computer.

Don't Talk to Strangers Online

A good rule in life is to not talk to people you don't know. This is also true when you are online. Sending messages to people you do not know personally can lead to problems. This includes emails, instant messages, chats, and comments on websites. You cannot really know who you are communicating with online. People online might not look like their profile picture! It's safest to avoid talking to anyone you don't personally know when you are online.

Safety is Important

Using computers can be fun and safe as long as we take steps to ensure our security.

Parental Control Settings and Age Requirements

Just like there are rules for which movies you can watch or what rides you can go on, the internet also has rules and things that are only for older kids and grown-ups. That's why it's important to have adults help you set up 'parental controls' on your computers, tablets, and phones.

What are Parental Controls? Parental control settings are special tools that let adults choose what content children can see online and how much time they spend on devices. They are like guides that make sure you only see websites, apps, and games that are safe and right for your age.

Why Do We Need Them?

- **Avoiding Inappropriate Content:** The internet has a lot of information, and some of it might not be suitable for young kids. Parental controls can block websites or apps that have things like violence, or other topics that are not for kids.
- **Preventing Online Risks:** These controls can help stop kids from accidentally sharing too much about themselves or talking to people they don't know online.
- **Managing Screen Time:** Parental controls can also help set limits on how long you can use a device. This helps you have time for playing outside and other activities too.

Age Rules for Websites and Games You might have seen that some websites or games ask how old you are before you can play. This is because many online games and websites have age rules or age ratings.

Why do some places online have age rules?

- **Content Ratings:** Just like movies have ratings (like G for everyone, or PG for parental guidance suggested), games and websites also have ratings to show what kind of content they have. For example, a game that says "E for Everyone" is okay for all ages. But a game that says "M for Mature" is for players 17 and older because it might have a lot of fighting or other mature ideas. These ratings are given by groups like the ESRB for video games.
- **Complex Ideas:** Some games or websites might have difficult puzzles, long stories, or tasks that are better for older kids or grown-ups to understand.
- **Protecting Kids:** Sometimes, age rules are there because of laws that keep kids safe online. For example, in the United States, there is a law that says websites need parents' permission before they can collect personal information from kids under 13.

Critical Thinking Questions

1. Why is it important to have strong passwords, and how is it similar to locking the door when you leave your house?
2. What could happen if you forget to log out of your account, and why is logging out an important safety step?

Questions (5)

1. What is one suggestion for creating a strong password?

MULTIPLE CHOICE

Choose the correct answer:

- A. Choosing a short password
- B. Using only lowercase letters
- C. Sharing your password with friends
- D. Mixing lowercase and uppercase letters

2. True or False: It's okay to share personal information online.

MULTIPLE CHOICE

Choose the correct answer:

- A. True
- B. False

3. What personal information should you avoid sharing online?

MULTIPLE CHOICE

Choose the correct answer:

- A. Your full name, addresses, and family member names
- B. Your favorite color
- C. Only your first name
- D. Your hobbies

4. What is the minimum length a password should be?

MULTIPLE CHOICE

Choose the correct answer:

- A. 4 characters
- B. 6 characters
- C. 8 characters
- D. 10 characters

5. Why is logging out of a computer important?

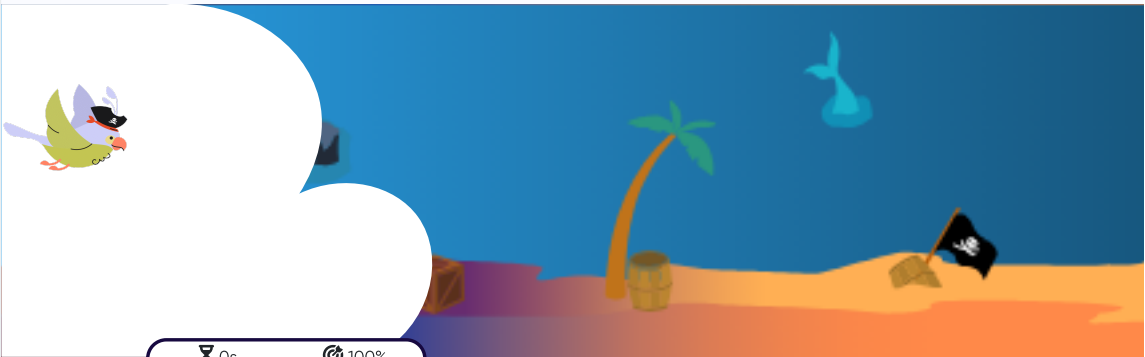
Choose the correct answer:

- A. It helps you find your work later
- B. It prevents others from accessing your account
- C. Logging out is unnecessary and just takes up time
- D. Logging out has no impact on how safe your information is

Games (3)

1. Internet Safety and Cybersecurity Typing Game

Full Screen Audio Instructions Restart Pause



0s 100%

Here are suggestions for

2. Internet Safety and Cybersecurity Category Game

Full Screen

Audio

Instructions

Answer Key




Pause

Clear All

Check Order

Attempts: 0

	Safe Practices Online	Unsafe Practices Online
Create long passwords		
Sharing personal information		
Logging in and out		
Mixing upper and lower case letters in a password.		
Talking to strangers		
Sharing a password		



3. Internet Safety and Cybersecurity Category Game 2

Full Screen

Audio

Instructions

Answer Key




Pause

Clear All

Check Order

Attempts: 0

	Example of a Strong Password	Example of a Weak Password	Example of Personal Information (You shouldn't share online)
Your Address			
Sunny#Day5			
Your Full Name			
Names of Family Members			
D3!R3@dP@nda			
Bunny\$2024			
asdfjkl;			
12345			
mypass			



Blocks Pro Challenges (1)

1. Be Safe Online

Be Safe Online

Program a presentation to teach the viewer about ways to be safe online. Program four sprites to present each of these points for how to be safe online:

Don't talk to strangers

Never share personal information

Log out

Use strong passwords

Use the broadcast message blocks so each sprite takes turns presenting their method for being safe on the internet.

Requirements

0/2

4 Looks

7 Event

Blocks must be connected to an Event block in order to pass the requirements

The image shows the Scratch code editor interface. The 'Code' tab is selected, and the 'Motion' category is chosen from the left sidebar. The code area contains the following blocks:

- move 10 steps
- turn 15 degrees
- turn 15 degrees
- go to random position
- go to x: 0 y: 0
- glide 1 secs to random position
- glide 1 secs to x: 0 y: 0
- point in direction 90
- point towards mouse-pointer
- change x by 10
- set x to 0
- change y by 10
- set y to 0
- if on edge, bounce
- set rotation style left-right

The right sidebar shows the 'Sprite' panel with 'Sprite1' selected, and the 'Stage' panel with 'Backdrops' and '1' visible. The stage area shows a small blue cat sprite.

Answer Keys & Solutions

Questions

1. What is one suggestion for creating a strong password?

MULTIPLE CHOICE

Correct Answer:

- A. Choosing a short password ✗ Incorrect
- B. Using only lowercase letters ✗ Incorrect
- C. Sharing your password with friends ✗ Incorrect
- D. Mixing lowercase and uppercase letters ✓ Correct

Explanation:

Having numbers, at least 8 characters, and lowercase and uppercase letters makes a strong password.

2. True or False: It's okay to share personal information online.

MULTIPLE CHOICE

Correct Answer:

- A. True ✗ Incorrect
- B. False ✓ Correct

Explanation:

Never share personal information online!

3. What personal information should you avoid sharing online?

MULTIPLE CHOICE

Correct Answer:

- A. Your full name, addresses, and family member names ✓ Correct
- B. Your favorite color ✗ Incorrect
- C. Only your first name ✗ Incorrect

D. Your hobbies

✗ Incorrect

Explanation:

Never share information that is unique to you

4. What is the minimum length a password should be?

MULTIPLE CHOICE

Correct Answer:

A. 4 characters

✗ Incorrect

B. 6 characters

✗ Incorrect

C. 8 characters

✓ Correct

D. 10 characters

✗ Incorrect

Explanation:

Anything less than 8 characters will make a weaker password.

5. Why is logging out of a computer important?

MULTIPLE CHOICE

Correct Answer:

A. It helps you find your work later

✗ Incorrect

B. It prevents others from accessing your account

✓ Correct

C. Logging out is unnecessary and just takes up time

✗ Incorrect

D. Logging out has no impact on how safe your information is

✗ Incorrect

Explanation:

If you don't log out others might be able to get into your account

Games

1. Internet Safety and Cybersecurity Typing Game

2. Internet Safety and Cybersecurity Category Game

Category Solutions:

Category 1: Safe Practices Online

- Mixing upper and lower case letters in a password.
- Logging in and out
- Create long passwords

Category 2: Unsafe Practices Online

- Sharing a password
- Sharing personal information
- Talking to strangers

Scoring:

- Gold: 1 attempts or fewer
- Silver: 2 attempts or fewer
- Bronze: 3 attempts or fewer

Students must sort items into their correct categories.

3. Internet Safety and Cybersecurity Category Game 2

Category Solutions:

Category 1: Example of a Strong Password

- D3!R3@dP@nda
- Bunny\$2024
- Sunny#Day5

Category 2: Example of a Weak Password

- 12345
- mypass
- asdfjkl;

Category 3: Example of Personal Information (You shouldn't share online)

- Your Full Name
- Your Address
- Names of Family Members

Scoring:

- Gold: 1 attempts or fewer
- Silver: 2 attempts or fewer
- Bronze: 3 attempts or fewer

Students must sort items into their correct categories.