

Internet Safety and Cybersecurity

Textbook

Internet Safety and Cybersecurity



The internet is a vast system of interconnected networks. It provides access to a massive amount of information and tools. However, like any complex system, it requires a methodical approach to use it effectively and securely. This document outlines key principles for navigating the internet, managing data, and utilizing online resources.

Data and Privacy

Not all data should be transmitted online.

- **Private Data:** Personal details such as a full name, home address, phone number, and passwords should be secured. Only share this information when absolutely necessary.
- **Public Data:** General information like favorite hobbies, books, or interests can be shared. However, any information made public on the internet can be viewed by anyone, so consider the permanent nature of online content before it is posted.

Passwords

Passwords function as a key to an account. A secure password is an important component of digital security.

- **Weak Passwords:** These are easily guessable, such as "password123" or common names. This type of password provides minimal security.
- **Strong Passwords:** These should include a combination of uppercase and lowercase letters, numbers, and special characters. Using distinct passwords for each account enhances security.



Security Practices

- **Communication:** Only communicate with known contacts. Identity verification is not always possible online.
- **Malicious Content:** Be cautious of unexpected emails or links from unknown sources, as they may contain viruses or other harmful software.

Data Collection and Management

- **Cookies:** These are small files used by websites to store user preferences. Users can manage cookies to control the data websites collect.
- **Pop-ups:** While some are harmless, others may be designed to collect data. Close any suspicious pop-ups immediately.
- **Smart Devices:** Devices like phones, tablets, and smart speakers collect user data. Users should regularly review and adjust their privacy settings.
- **Network Security:** Public Wi-Fi that does not require a password can expose data. Using secure, encrypted networks or a Virtual Private Network (VPN) can protect data transmission.

Websites and Applications: Tools for Various Purposes

The internet is a repository of websites and applications (apps), each designed for specific functions. They can be viewed as digital instruments, each with a unique purpose.

For Education and Learning: Websites and applications serve as educational tools. They facilitate learning new subjects, practicing skills, and conducting research. Examples include online encyclopedias, math practice applications, and virtual simulations. These tools contribute to knowledge acquisition.

For Communication: Numerous applications enable users to exchange messages, engage in video conferences, and share files. These applications facilitate digital communication.

For Content Creation: There are applications for tasks like drawing, composing music, editing videos, and writing. Users can acquire new skills, such as coding or following a recipe, through online tutorials. These tools assist in the development of skills.

For Entertainment: Websites and applications provide a wide range of media, including games, videos, and music for recreational use.

Responsible Tool Selection

When selecting a website or application, it is important to choose tools that are secure and functional.

- **Functionality:** The tool should serve its intended purpose and not contain distracting elements like excessive advertisements. Choose applications that are efficient for the task at hand.
- **Security:** The application should protect user data and not request excessive private information. Reliable applications adhere to strong security protocols.
- **Resource Evaluation:** If there is any uncertainty about a website or application, consult a knowledgeable adult or teacher for guidance on selecting effective and safe resources.

Critical Thinking Questions

1. Explain the functional difference between private and public information in a digital context.
2. How can tools like strong passwords or managing cookies contribute to digital security while using the internet?

Questions (5)

1. True or False: It's okay to share your passwords with friends so they can access your accounts too.

MULTIPLE CHOICE

Choose the correct answer:

- A. True
- B. False

2. What makes a password strong?

MULTIPLE CHOICE

Choose the correct answer:

- A. Using your name or birthdate
- B. Including a mix of letters, numbers, and special characters
- C. Keeping it short and easy to remember
- D. Using the same password for all your accounts

3. True or False: It's NOT safe to share personal information like your home address or phone number on social media.

MULTIPLE CHOICE

Choose the correct answer:

- A. True
- B. False

4. Which of the following is an example of private information?

SELECT MULTIPLE

Select all that apply:

- A. Your favorite book
- B. Your schools name
- C. Your password
- D. Your favorite hobby

5. What should you do if you receive an email from someone you don't know, asking for personal information?

MULTIPLE CHOICE

Choose the correct answer:

- A. Reply with your information to be helpful
- B. Ignore the email and delete it
- C. Click on any links in the email to see what it's about
- D. Share the email with your friends

Games (3)

1. Internet Safety and Cybersecurity Typing Game


Full Screen

Audio

Instructions

Restart

Pause



0s 100%

The internet is a wonderf

2. Conditionals, Internet Safety, and Cybersecurity Category Game

Full Screen

Audio

Instructions

Answer Key

Pause

Clear All

Check Order

Attempts: 0

MagicTree*45Leaf

welcome

Giraffe\$Dancel27

abc123

Leslie2

RocketShip\$7Star!

Blue!Sky#42Moon

password

123456

SunnyDays82*Lake

Weak Password

Strong Password

3. Conditionals, Internet Safety, and Cybersecurity Category Game 2

Full Screen

Audio

Instructions

Answer Key

Pause

Clear All

Check Order

Attempts: 0

Don't Talk to Strangers	Click on anything that looks interesting online.	Don't Share Personal Information	Ways to Stay Safe Online	Ways that are Less Safe Online

Talk to people

Use Strong words

Be disrespectful to others online.

Answer Keys & Solutions

Questions

1. True or False: It's okay to share your passwords with friends so they can access your accounts too.

MULTIPLE CHOICE

Correct Answer:

A. True

✗ Incorrect

B. False

✓ Correct

Explanation:

Remember, passwords are like keys to your accounts.

2. What makes a password strong?

MULTIPLE CHOICE

Correct Answer:

A. Using your name or birthdate

✗ Incorrect

B. Including a mix of letters, numbers, and special characters

✓ Correct

C. Keeping it short and easy to remember

✗ Incorrect

D. Using the same password for all your accounts

✗ Incorrect

Explanation:

Think about the components of a secure password as mentioned in the entry.

3. True or False: It's NOT safe to share personal information like your home address or phone number on social media.

MULTIPLE CHOICE

Correct Answer:

A. True

✓ Correct

B. False

✗ Incorrect

Explanation:

Consider which information should remain private

4. Which of the following is an example of private information?

SELECT MULTIPLE

Correct Answers:

A. Your favorite book

✗ Incorrect

B. Your schools name

✓ Correct

C. Your password

✓ Correct

D. Your favorite hobby

✗ Incorrect

Explanation:

Private information should be kept confidential and not shared publicly.

5. What should you do if you receive an email from someone you don't know, asking for personal information?

MULTIPLE CHOICE

Correct Answer:

A. Reply with your information to be helpful

✗ Incorrect

B. Ignore the email and delete it

✓ Correct

C. Click on any links in the email to see what it's about

✗ Incorrect

D. Share the email with your friends

✗ Incorrect

Explanation:

Consider the advice about handling suspicious emails in the tips section.

Games

1. Internet Safety and Cybersecurity Typing Game

2. Conditionals, Internet Safety, and Cybersecurity Category Game

Category Solutions:

Category 1: Weak Password

- 123456
- password
- abc123
- welcome
- Leslie2

Category 2: Strong Password

- Giraffe\$Dance!27
- RocketShip\$7Star!
- Blue!Sky#42Moon
- SunnyDay@82*Lake
- Magic!Tree*45Leaf

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. Conditionals, Internet Safety, and Cybersecurity Category Game 2

Category Solutions:

Category 1: Ways to Stay Safe Online

- Don't Talk to Strangers
- Be aware of Spam and Clickbait
- Use Strong Passwords
- Ask an Adult if You're Unsure
- Don't Share Personal Information
- Be Kind and Respectful Online

Category 2: Ways that are Less Safe Online

- Talk with people you don't know.
- Click on anything that looks interesting online.
- Use your name in your passwords.
- Keep suspicious behavior to yourself.
- Share your name and address online.
- Be disrespectful to others online.

Scoring:

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

Students must sort items into their correct categories.