

**Chapter 16 - Security, Privacy, and Safety**  
**16.3 - Restricting Access to Personal Information Section**

**Grading:**  
**Notes:** \_\_\_\_\_/20  
**Lesson Review:** \_\_\_\_\_/20  
**Wireless Access:** \_\_\_\_\_/20  
**Technology changing:** \_\_\_\_\_/20  
**Internet Security:** \_\_\_\_\_/20  
**Total points:** \_\_\_\_\_/100

**Essential Question**

- What is the importance of restricting access to your personal information to your financial success?

**Section 16.3 Learning Goals**

After completing this section, you will be able to:

- Describe how firewalls and gateways protect data.
- Identify ways to provide password protection.
- List safe hardware and software practices.
- Discuss how to combat viruses and other malware.
- Explain how to determine if websites are reliable.
- Prevent computer threats from public intrusion.

**Competencies**

- 6670.41 Examine social, ethical, and legal issues associated with information technology.
- 6670.42 Debate an ethical issue related to using computer and Internet technology

**Terms**

- gateway
- passphrase
- personal firewall
- strong password
- uninterruptable power supply (UPS)

**Firewalls and Gateways**

- **Personal firewall** controls the \_\_\_\_\_ to an individual machine
- Computer **gateway** is a device that joins two networks
- \_\_\_\_\_ difference between firewall



and gateway in small network

- Contained in single unit

### Password Protection

- Password Management
  - **Strong passwords** are \_\_\_\_\_ for both humans and computers to crack
  - **Passphrases** are phrases \_\_\_\_\_ of real words on which a password is based
  - Passwords for Documents
- Password Use
  - Never share the password
  - Do not use the \_\_\_\_\_ password for multiple accounts
  - Change regularly
  - Use strong passwords
  - Change \_\_\_\_\_ passwords if suspicious activity is suspected

### Safe Hardware and Software Practices

- UPS, System Restore Backup Points, and Individual File Backups
  - **Uninterruptable Power Supply (UPS)** is a device that protects computer systems and files against power \_\_\_\_\_ and outages
  - Provides power while system is down
- Maintenance Schedule
  - Review setup twice a year
  - Regularly review application security settings
- Offers of \_\_\_\_\_ Software Protection
  - Legitimate Free Software
    - *Distributed as shareware*
    - *Upgrade is not free*
  - Free PC scans
    - *Most are scams*
    - *Close browser window to get rid of it*
    - *Pop-up \_\_\_\_\_ may prevent*

### Combating Viruses and Other Malware

- Block Virus Transmission
  - \_\_\_\_\_ e-mail if there is any doubt
  - Scan regularly
- Repair Virus Damage
  - Quarantine
  - Remove
- Keep Antivirus Software Updated
  - \_\_\_\_\_ before navigating Internet
  - Regularly update

## Determining Reliable Websites

- Safe File Downloads
  - Be \_\_\_\_\_ of certain file types
  - Consider the download
- Internet Scams or Fraudulent Websites
  - Snopes
  - Be wary of \_\_\_\_\_ e-mails
- E-commerce Sites
  - Pose some risks
  - \_\_\_\_\_ purchase from a spammer
- Pirated Media
  - Never download \_\_\_\_\_ media
  - Fines
  - Malware

## Preventing Threats from Public Intrusion

- Peer-to-Peer File Sharing
    - Legal versus illegal
    - \_\_\_\_\_ to malware
  - Public Internet Providers
    - \_\_\_\_\_ should be avoided
    - Easy access for hackers
  - Access Security
    - Wireless Security
      - WAP/WAP2
      - WEP is prone to hacking
      - HTTPS and VPN
    - Public Computers
      - Relatively safe for generalized surfing
      - Very risky for \_\_\_\_\_ information
      - \_\_\_\_\_ enter credit card information
  - Guidelines
    - Do not \_\_\_\_\_ to save any log-on information
    - Always log out of websites
    - \_\_\_\_\_ log off the computer
    - Disable automatic login features
    - Do not leave the computer unattended
    - Enable "private" or "anonymous" browsing
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### Section 16.3 Review

1. What does a network firewall protect against?
    - a. Data files combusting
    - b. Malicious network traffic
    - c. Poor passwords
    - d. Unauthorized network shutdown
  2. What does [www.Snopes.com](http://www.Snopes.com) provide?
    - a. Free e-mail
    - b. Antivirus software
    - c. Evaluation of Internet rumors
    - d. E-Commerce
  3. What forms a barrier between trusted and distrusted networks?
    - a. Gateway
    - b. Firewall
    - c. Uninterruptable power supply
    - d. P2P protocol
  4. Which of the following is the most secure wireless protocol?
    - a. WEP
    - b. WAP2
    - c. HTTPS
    - d. Wi-Fi
  5. What are the characteristics of a strong password?
  6. During a thunderstorm, what should be done to the computer?
  7. \_\_\_\_\_ T/F A computer gatekeeper is a device that joins two networks
  8. \_\_\_\_\_ T/F A personal firewall controls traffic to an individual machine.
  9. \_\_\_\_\_ T/F An uninterruptable power supply is a device that protects computer systems and data against power surges and outages.
  10. \_\_\_\_\_ T/F Using a public computer carries few security risks if you log out when finished.
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## **Wireless Access**

As mentioned in this lesson, many organizations provide guidelines for using their computers and networks. Complete the following:

1. Access the Dorchester County Library Web site at [www.dcl.lib.sc.us/accept.htm](http://www.dcl.lib.sc.us/accept.htm).
2. Read the Conditions of Use and Wireless Access sections.
3. Use your word-processing program to respond to the following questions:
  1. Which three rules do you think are the more important and why?
  2. Which three rules do you think are the least important and why?
  3. Do you agree with the guidelines contained in these rules? Explain your answer.
4. Locate two similar Web pages that list rules for using a library's computers. List their Web site addresses. How do their guidelines compare to the Dorchester Library Web site?

## **Technology changing through the years**

Most dentist today use computers in one way or another. For instance, instead of viewing a film of an x-ray, you can view it on a computer screen. Some dentists use a sonic device to clean teeth. Use search engines to see what you can discover about how dentist are using computers. Prepare a presentation and share it with the class.

## **Internet Security and Ethical Use**

Using the Internet, research the laws that relate to Internet security. When were they created? What is their purpose? Next, research laws regulating hacking and browser hijacking. Summarize what you learned about Internet security and ethical conduct. Minimum 2 paragraphs (min. 5 sentences each)