

CarnegieMellon

CARNEGIE CADETS

The MySecureCyberspace Game

TEACHER'S COMPANION

ini Information Networking Institute
Carnegie Mellon University

my
SECURE
cyberspace

created at CARNEGIE MELLON UNIVERSITY

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Introduction

About Carnegie Cadets: The MySecureCyberspace Game

Carnegie Cadets: The MySecureCyberspace Game is an interactive Flash game designed for fourth and fifth graders that teaches Internet safety and computer security in a safe, fun setting. Created by Carnegie Mellon's Information Networking Institute and Carnegie Mellon CyLab, the game is part of the university's MySecureCyberspace cyberawareness outreach project and is provided as a free download from www.carnegiecyberacademy.com.

Carnegie Mellon created MySecureCyberspace as a response to the National Strategy to Secure Cyberspace, which calls for every American to help create a safe Internet by securing his or her own corner of cyberspace. The MySecureCyberspace portal, Carnegie Cyber Academy website, and MySecureCyberspace game give everyday citizens the tools and knowledge they need to do this.

About the Teacher's Companion

This Teacher's Companion outlines lessons that a teacher may cover in an upper elementary classroom. It incorporates content and activities from Carnegie Cadets: The MySecureCyberspace Game, as well as the related websites www.carnegiecyberacademy.com and www.mysecurecyberspace.com.

These lesson starters are suggestions for sequencing, tools, and activities that introduce and reinforce the terms, definitions, and subject areas that make up cyber security. Each lesson contains learning objectives and learning outcomes, suggestions for tools and activities, and worksheets for students.

NETS Grid

This grid identifies how the lessons match the National Educational Technology Standards (NETS). For a detailed list of the standards and their subtopics (a through d), go to: <http://www.iste.org>

| Topics | | I. Creativity and Innovation | II. Communication and collaboration | III. Research and Information Fluency | IV. Critical Thinking, Problem Solving and Decision Making | V. Digital Citizenship | VI. Technology Operations and Concepts |
|-----------|----------------------------------|------------------------------|-------------------------------------|---------------------------------------|--|------------------------|--|
| Lesson 1 | The Internet | ✓ c | | | | ✓ all subtopics | ✓ a |
| Lesson 2 | Email | ✓ c | ✓ a | | | ✓ a & b | ✓ all subtopics |
| Lesson 3 | Cyber Threats | ✓ c | | | | ✓ a | ✓ a & b |
| Lesson 4 | Cyber Crime (1) | ✓ c | | | ✓ a & c | ✓ a & b | ✓ b |
| Lesson 5 | Cyber Crime (2) | ✓ c | | | | ✓ a | ✓ a |
| Lesson 6 | Chat rooms and Instant messaging | ✓ c | ✓ all subtopics | | | ✓ a & b | ✓ b |
| Lesson 7 | Netiquette | ✓ c | ✓ all subtopics | | | ✓ all subtopics | |
| Lesson 8 | Cyberbullying | ✓ c | | | ✓ a | ✓ a & b | |
| Lesson 9 | Online Data | ✓ c | | | | ✓ a & b | ✓ a & d |
| Lesson 10 | Website threats | ✓ c | | | | ✓ a | ✓ b & d |
| Lesson 11 | Search Engines and Research Tips | ✓ c | | ✓ a & b | | ✓ a | ✓ a & d |
| Lesson 12 | Copyright and Plagiarism | ✓ c | | ✓ a & b | | ✓ a | ✓ a & d |
| Lesson 13 | Cell phones | ✓ c | | | ✓ a | ✓ all subtopics | |
| Lesson 14 | Online Reputation | ✓ c | | | ✓ c | ✓ all subtopics | ✓ a & d |



Game Tips for Teachers

Navigating the Game

Objects that the player can interact with will have an orange highlight when the cursor is held over them and the cursor will change shape to indicate the available interaction. Clicking on a door or on an orange navigation arrow will take the player to another location. Clicking on a character will start a dialogue with them.

By choosing different responses in the dialogue box, the player can interact with characters and make decisions.

Talking to characters can also unlock extra ReQuests and rare items.



An orange exclamation mark means that you can interact with an object.

Some interactive objects have fun animations and some open pages of the Carnegie Cyber Academy Website.

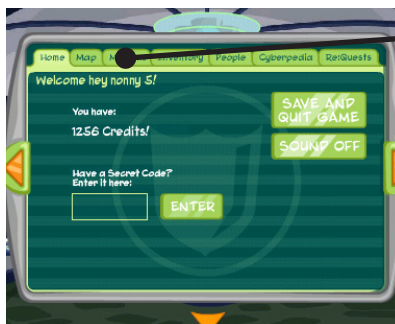
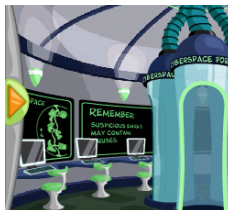


Using the PAL

The PAL is the player's game menu and contains all the information about the progress in the game, such as credits and badges earned and progress in assigned tasks. It also contains maps of all the areas of the game, the player's inventory, biographies of all the characters and an encyclopedia of cyber security terms.

Players can access the PAL at any time except when they are talking to a character or are in a mission.

To access the PAL, click on the orange arrow on the left side of the screen.



Click on the tabs along the top of the screen to access the different pages of the PAL.

The PAL's map indicates where you are located with a star.



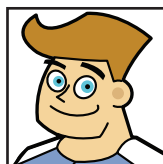
Meet the Characters: Academy Faculty and Cadets



Commander Omni



Captain Wits



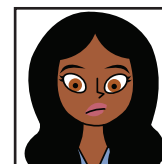
Officer Ward



Doctor Keen



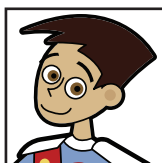
Trey



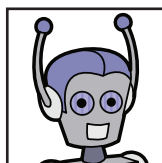
Maya



Betty



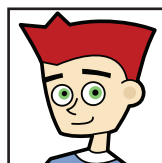
Carlo



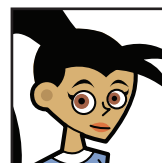
Scout



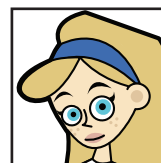
Erika



Alan



Alexi

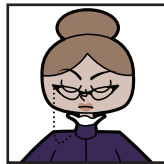


Dana

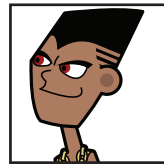
Meet the Characters: Cyber Criminals and Villains



Elvirus



Ms. Information



M.C. Spammer



The Dis Guys



The ID Bandit



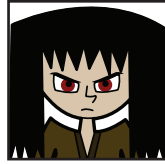
The Master Hacker



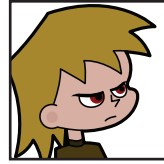
The Phisherman



Captain Jack Plunder



Jax, Cyber Bully



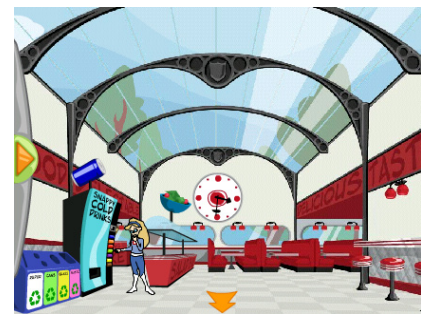
Sparky, Script Kiddie

Locations: Academy Ground Level



CyberPort

The CyberPort is how you enter Cyberspace, but you will need a Cyberspace Pass from Commander Omni first. Talk to her in her office to get one.



Cafeteria



Atrium



Omni's Office

Locations: Academy 2nd Floor



Academy Store

Each player has a dorm room that he or she can decorate with items bought from the Academy Store.

Players must play the missions in Cyberspace to earn credits to spend at the Academy Store.



Player's Dorm Room

About Cyberspace

At the Academy, Cyberspace is the world of the Internet, and each building in Cyberspace focuses on a specific Internet-related activity. The Message Center contains missions about email, the Databank has website-related missions, and the Clubhouse has missions about online communications. Also in Cyberspace, there are the information resource centers, Diagnostics and the Detention Center, where the player can go to learn about computer maintenance and cyber crimes.

Every building in Cyberspace has a supervisor who acts as a teacher for each subject and briefs the player before the start of a mission.

Locations: Cyberspace - Data Stream Central

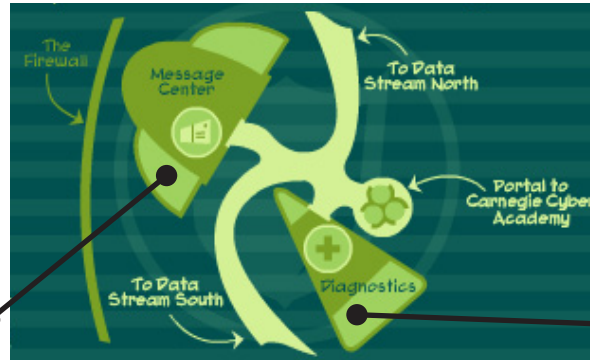
The Message Center is where the Email Missions are.



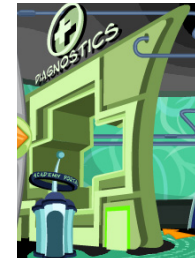
Trey,
Message Center
Supervisor



Message Center



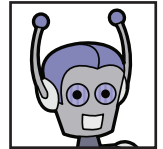
At Diagnostics, players can learn about Computer Maintenance and Protecting your Data.



Diagnostics



Dr. Keen,
Diagnostics Lab
Technician



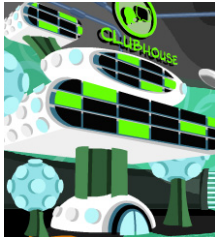
Scout,
Lab Assistant

Locations: Cyberspace - Data Stream North

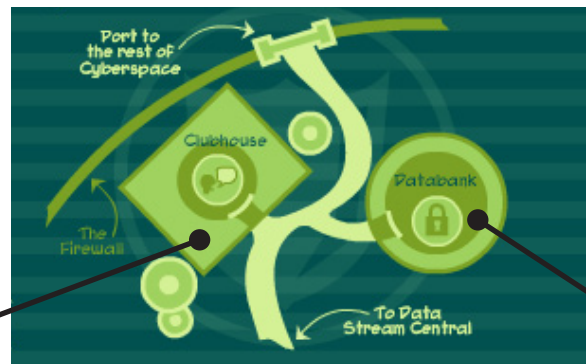
The Clubhouse is where the Communications Missions are.



Betty,
Clubhouse
Supervisor



Clubhouse



The Databank is where the Website Missions are.



Databank



Maya,
Databank
Supervisor

Locations: Cyberspace - Data Stream South

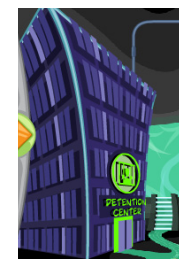
The CyberMall is under construction for future missions about online shopping.



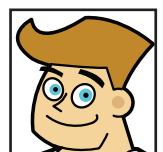
CyberMall



At the Detention Center, players can learn about Cyber Crimes and Cyber Criminals.



Detention Center



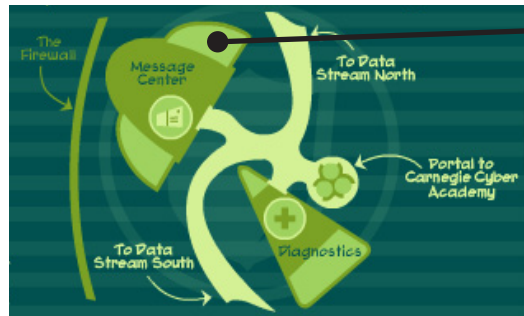
Officer Ward,
Detention
Center Security
Officer

About the Training Missions

In Carnegie Cadets: The MySecureCyberspace Game, players join the Cyber Defense training program at the Carnegie Cyber Academy, where training missions teach different Internet topics and cover fundamental cyber safety skills. Players earn Gold Badges for completing missions and unlock new features with each success.

For each training mission, Academy supervisors arm the player with information and advice, and later award the player a Gold Badge for each mission success. Upon completing missions, players unlock ReRequests. ReRequests are bonus tasks, which could involve talking to certain characters or fetching items in order to receive rare items and extra Academy Credits. The points earned can be spent on items for decorating their dorm rooms at the Academy.

Locating the Missions in Cyberspace



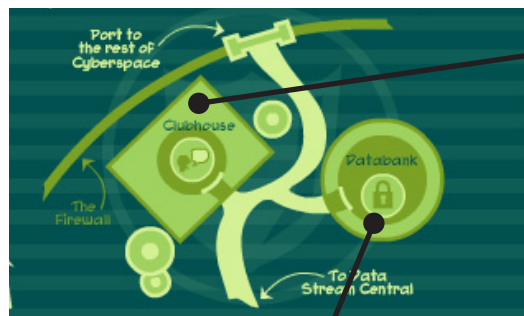
Message Center



Email Mission Level 1



Cadets learn about spam and how to deal with it.



Clubhouse

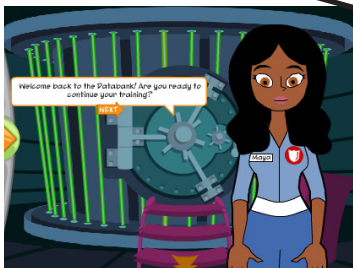


Communications Missions Level 1



Cadets learn about protecting their personal information.

Databank



Website Mission Level 1



Cadets learn how to identify and avoid risky web content.

Level 2



Cadets learn how to deal with cyber bullies.

Questions?

We hope you enjoy the game and the Teacher's Companion. Please direct any comments and suggestions to info@CarnegieCyberAcademy.com.

Appendix

After the 13 lesson plans, there are print-friendly templates for classroom activities:

- "Make a Mask" for Lesson 6
- "Flip the Card" for Lesson 12
- "Threat or Safe" for Lesson 12



Overview of Available Activities

Many of the lessons in this companion feature Carnegie Cadets: The MySecureCyberspace Game, but we also provide additional materials on the Carnegie Cyber Academy website that can be used to supplement the lessons: www.carnegiecyberacademy.com.

| Lesson | Activities in the Lesson | Additional Materials and Activities |
|--|---|--|
| Lesson 1: The Internet | Offline: <ul style="list-style-type: none"> Complete the Network Activity (described in lesson) Using Carnegie Cadets: <ul style="list-style-type: none"> Attend the Academy orientation Obtain a Cyberspace Pass from Commander Omni Use the Cyberpedia in the PAL | <ul style="list-style-type: none"> Learn about the different parts of a computer on the How Computers Work faculty page (http://www.carnegiecyberacademy.com/facultyPages/computer/computers.html) Learn about how information packets travel through the Internet in the Packet the Rabbit game (http://www.carnegiecyberacademy.com/funStuff/easter/packets.html) |
| Lesson 2: Email | Offline: <ul style="list-style-type: none"> Complete the Email Notecard Activity (described in lesson) Using Carnegie Cadets: <ul style="list-style-type: none"> Use the Cyberpedia in the PAL | |
| Lesson 3: Cyber Threats | Using Carnegie Cadets: <ul style="list-style-type: none"> Learn about Malware in the Hall of Quarantine at Diagnostics Complete the Email Level 1 training mission about recognizing and deleting spam Offline: <ul style="list-style-type: none"> Read Hint Sheet 01 on Identifying Spam (printout in the Appendix) | <ul style="list-style-type: none"> Learn about Malware in the Dance Dance Malware game (http://www.carnegiecyberacademy.com/funStuff/danceDanceMalware/ddm.html) Learn about how to protect your devices from malware on the Computer and Device Defense faculty page (http://www.carnegiecyberacademy.com/facultyPages/deviceDefense.html) |
| Lesson 4: Cyber Crime (part 1) | Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the ReQuest: Alan: The Spam Attack Take the Detention Center Tour, talk to the detainees on the Cell Block and Sparky in Cyber Forensics Read the character bios in the PAL | <ul style="list-style-type: none"> Learn about how cyber criminals operate and how they get caught on the Cyber Crimes and Criminals faculty page (http://www.carnegiecyberacademy.com/facultyPages/cyberCrime.html) Help Dana complete her report on the cyber villains in the Dana's CyberReport game (http://www.carnegiecyberacademy.com/funStuff/cybervillainsReport/cybervillainsReport.html) |
| Lesson 5: Cyber Crime (part 2) | Offline: <ul style="list-style-type: none"> Read Hint Sheet 02 on Protecting your Personal Information (printout in the Appendix) Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the Detention Center Tour, talk to Officer Ward and view the Wall of Shame Read the character bios in the PAL | <ul style="list-style-type: none"> Learn about protecting your Personal Information from cyber criminals on the Protecting Your Information faculty page (http://www.carnegiecyberacademy.com/facultyPages/communication/personalInfo.html) |
| Lesson 6: Chat Rooms & Instant Messaging | Offline: <ul style="list-style-type: none"> Complete the Alias Mask Activity (described in lesson, printout in the Appendix) Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the Communications Level 1 training mission about Personal Information | <ul style="list-style-type: none"> Learn more about communicating safely online on the Communicating Safely faculty page (http://www.carnegiecyberacademy.com/facultyPages/communication/safely.html) Learn how to protect yourself when playing online games in the Online Gamine Safety Challenge (http://www.carnegiecyberacademy.com/funStuff/onlineGaming/onlineGaming.html) |

| Lesson | Activities in the Lesson | Additional Materials and Activities |
|---|---|--|
| Lesson 7: Netiquette | Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the ReQuest: Dana: Personal Info trouble Offline: <ul style="list-style-type: none"> Read Hint Sheet 06 on Netiquette Tips (printout in the Appendix) Using the Academy website: <ul style="list-style-type: none"> Complete Betty's Netiquette quiz (http://www.carnegiecyberacademy.com/funStuff/netiquette/netiquette.html) | <ul style="list-style-type: none"> Learn more guidelines for good netiquette on the Netiquette faculty page (http://www.carnegiecyberacademy.com/facultyPages/communication/netiquette.html) |
| Lesson 8: Cyberbullying | Offline: <ul style="list-style-type: none"> Read Hint Sheets 04 and 05 on Dealing with and Reporting Cyberbullying Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the Communications Level 2 training mission about Cyberbullying Complete the ReQuest: Carlo: Cyberbullying bind | <ul style="list-style-type: none"> Learn more about Cyberbullying on the Cyberbullying faculty page (http://www.carnegiecyberacademy.com/facultyPages/communication/bullying.html) Test your Cyberbullying knowledge with the Cyberbullying Quiz in Scout & Stuart's animated short(http://www.carnegiecyberacademy.com/funStuff/stuartScout/stuartScout_eps1.html) Help Carlo put out the raging flame war in the Fight the Flame War game (http://www.carnegiecyberacademy.com/funStuff/flamewar/fightTheFlameWar.html) |
| Lesson 9: Online Data | Using a web browser: <ul style="list-style-type: none"> Complete the Web Research Activity (described in lesson) | <ul style="list-style-type: none"> Learn more about evaluating site credibility on the Academy Library page (http://www.carnegiecyberacademy.com/library.html) |
| Lesson 10: Website Dangers | Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the Websites Level 1 training mission about Website dangers Complete the ReQuest: Erika: Popup problems | <ul style="list-style-type: none"> Learn about how to protect your devices from malware on the Computer and Device Defense faculty page (http://www.carnegiecyberacademy.com/facultyPages/deviceDefense.html) |
| Lesson 11: Search Engines & Research Tips | Using Carnegie Cadets: <ul style="list-style-type: none"> Complete the ReQuest: Erika: Popup problems Offline: <ul style="list-style-type: none"> Read Hint Sheet 03 on Recognizing and Avoiding Website Dangers | <ul style="list-style-type: none"> Learn more about using web resources and effective web research on the Academy Library page (http://www.carnegiecyberacademy.com/library.html) |
| Lesson 12: Copyright & Plagiarism | Offline: <ul style="list-style-type: none"> Complete the Flip the Card Activity (described in lesson, printouts in the Appendix) Complete the Threat or Safe Activity (described in lesson, printouts in the Appendix) | <ul style="list-style-type: none"> Learn more about avoiding Plagiarism on the Using Web Resources page (http://www.carnegiecyberacademy.com/libraryGuides/using.html) |
| Lesson 13: Cell Phones | | <ul style="list-style-type: none"> Learn more about protecting your mobile devices on the Defending Mobile Devices faculty page (http://www.carnegiecyberacademy.com/facultyPages/computer/mobile.html) |
| Lesson 14: Online Reputation | Offline: <ul style="list-style-type: none"> Read Hint Sheet 05 and 07 on Reporting Cyberbullying and Growing a Positive Online Reputation Using the Academy website: <ul style="list-style-type: none"> Complete the Growing an Online Reputation game (http://www.carnegiecyberacademy.com/funStuff/onlineReputation/onlineRep.html) | <ul style="list-style-type: none"> Learn more about managing your Online Reputation on the Managing your Online Identity faculty page (http://www.carnegiecyberacademy.com/facultyPages/communication/identity.html) |



Lesson 1: The Internet

Learning Objectives

- Introduce new cybersecurity concepts, terms and definitions to students.
- Raise students' awareness of cyber threats associated with using communication tools on the Internet.
- Positively impact students' online behavior.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecure Cyberspace Game installed
- A file folder for teacher
- Paper and writing utensils
- Worksheet for Lesson 1: The Internet

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|--|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Give the worksheet to students and explain what the Internet is. (Worksheet, part 1) (5 min)• Start an orientation of the Carnegie Cyber Academy. Lead students into the game. Make sure students listen to Commander Omni and Captain Wits. (10 min) | <ul style="list-style-type: none">• Read part 1 of the worksheet.• Log in and start the game. (If the students don't have accounts, create new accounts at the Academy website.) Listen to Commander Omni's introduction, Captain Wits' dorm room guide and attend the academy orientation. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Demonstrate the concept of a network by asking students to stand up and hold hands. Give one student a file folder. While students are passing the file folder to each other, explain "what it means to enter cyberspace." (5 min)• Direct students to talk to Omni in the game to get the Cyberspace Pass. (5 min)• Have students write down their offline identity and then create an online identity. This activity shows how easily they can create an alias to protect their offline identity. (Worksheet, part 2) (10 min) | <ul style="list-style-type: none">• Pass the file folder among the human network.• Go back to the game. Click Omni's office door and have a conversation with her. To get a Cyberspace Pass, ask her how to get started.• Write down their real identity (name, age, telephone number, etc.) on the worksheet. Then create an "online identity" by making up a fake name, age and parents. Write down their online identity on the worksheet. |
| Reinforce (10 min) | <ul style="list-style-type: none">• To make sure students understand the concept of the Internet, have students fill-in the cyber defense terms on the worksheet using the PAL's Cyberpedia in the game. (Worksheet, part 3) (10 min) | <ul style="list-style-type: none">• Go back to the game. Open the PAL and click on the Cyberpedia tab. Using the Cyberpedia, fill in the cyber defense terms in the worksheet. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Identify concepts presented in this lesson (e.g. cyberspace, online identity).
- Identify and recognize cyber threats presented in this lesson (e.g. cyber criminal).
- Have a sound understanding of how the Internet works.
- Define the cyber defense terms introduced in this lesson.
- Use motor skills while navigating the game (e.g. mouse, keyboard arrows, clicking a character for instruction).



Worksheet 1: The Internet

Date:

Name:

1. What is the Internet?

A computer network that connects thousands of computers around the world. You can use the Internet to browse websites, communicate with others and send and receive files.



Commander Omni

2. Your Identity

| Personal Information | Offline Identity (Your real identity) | Online Identity (Your fake identity) |
|----------------------|---------------------------------------|--------------------------------------|
| Your Name | | |
| Your School | | |
| Your Date of Birth | | |
| Telephone Number | | |
| Your Parents' Names | | |

3. Cyber Defense Terms

| Term | Definition |
|----------------------|------------|
| Online Identity | |
| Offline Identity | |
| Cyberspace | |
| Personal Information | |
| Cyber Criminal | |
| Cyber Villain | |
| Cyber Defender | |



Lesson 2: Email

Learning Objectives

- Introduce communication concepts, terms and definitions related to email.
- Introduce cybersecurity issues related to the use of email.
- Raise awareness on the appropriate behavior related to using email as an electronic tool of communication.
- Reinforce students' motor skills while navigating the game software.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed.
- Blank note cards and writing utensils
- Worksheet for Lesson 2: Email

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|--|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Ask students how many of them have their own email address while handing out the worksheet. (1 min)• Lead students into the game. Explain what "Email" and "Email address" are using the PAL's Cyberpedia. (Worksheet, part 1) (7 min)• Explain "Username" and "Password" using the PAL and worksheet. (Worksheet, part 2) (7 min) | <ul style="list-style-type: none">• Start the game. Open the PAL and click on the Cyberpedia tab. Find "Email " and "Email Address" and read about them, and read part 1 of the worksheet.• Read about "Username" and "Password" in the Cyberpedia, and read part 2 of the worksheet. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Let students attempt the two quizzes about choosing a good username and password for Carlo. (Worksheet, part 2) (3 min)• Share the correct answers for the quizzes (2 min)<ul style="list-style-type: none">• Q1: MonkeyTree• Q2: 2kC_6ro_5• Distribute blank note cards to students. Have students create fake email addresses and write messages to each other on the note cards.• Have students create a chain and pass the cards down the chain of students until they reach the intended recipient. (5 min)• Let the students discuss the four questions. (10 min) | <ul style="list-style-type: none">• Try quiz #1 and #2 in the worksheet.• Write a message to another student on the note card using a fake email address. Pass this "email" through the chain of students to the recipient.• Discussion questions:<ul style="list-style-type: none">• Could others read the email message if they wanted to?• What personal information did you include in your email?• How private is the information you sent to your friend?• In your opinion, what could you and couldn't you include in an email message? |
| Reinforce (10 min) | <ul style="list-style-type: none">• Based on students' discussion, explain email and privacy:<ul style="list-style-type: none">• Email can be read by other people or forwarded and copied countless times.• Keep personal information private and do not send secret or embarrassing information through email. (Worksheet, part 3) (10 min) | <ul style="list-style-type: none">• Read the cartoon in the worksheet and discuss email and privacy. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Identify cybersecurity concepts related to the use of email.
- Follow a few cybersecurity steps to secure private information online, e.g. unique username and password.
- Understand the importance of privacy and keeping personal information private.
- Have a sound understanding of how email works.
- Define the cyber defense terms introduced in this lesson.
- Navigate the game software utilizing motor skills; e.g. using the mouse, keyboard arrows.



Worksheet 2: Email

Date: _____

Name: _____

1. What is Email?

name@domain.com

An alias for you The organization who gives you the email address

You can attach text files, pictures or music to emails.



Trey, Message Center Supervisor

2. Username and Password

Which words are good to use for my username?

Quiz 1: Circle a good username for Carlo.

CyberPortTech
SoccerCarlo
MonkeyTree
CyberCarlo
Carlo1994
AcademyBoy

My Friends know my birthday is January 18th and my hobby is soccer!

How can I make a strong password?

My password is a secret. I don't tell it to anyone, not even my best friends!

Quiz 2: Circle a strong password for Carlo.

Cool118Carlo
1994caRLO
Cyber_PortBoy
0118_Carlo
Tech_118_carlo
2kC_6po_5



Carlo, CyberPort Technician

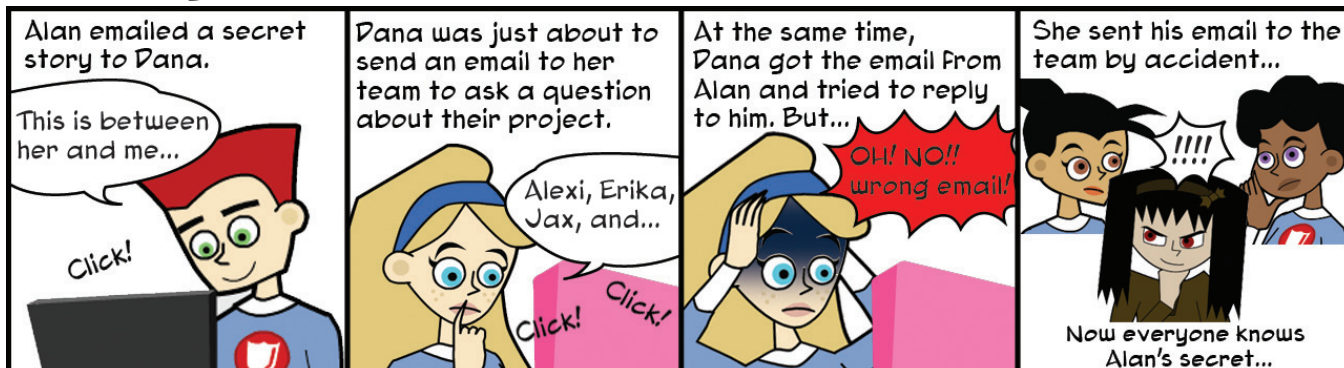


Tip: Do not use your real name and any information that could help people find or identify you, like your age, where you live, your hobbies or your gender.



Tips: Use a combination of letters, numbers and special characters. Make it longer than 6 characters. Change your password often to help keep it strong and secure.

3. Privacy in Email



Tip: An email passes from computer to computer across the Internet where it can be read by other people, even strangers. An email can also be easily forwarded and copied countless times. Keep in mind that you should never send secret information or embarrassing information over email. Always be careful about what information you include in an email message.



Lesson 3: Cyber Threats

Learning Objectives

- Introduce new terms related to cyber threats.
- Increase students' knowledge of cyber threats that can harm a computer and the data stored on it.
- Emphasize the use of anti-virus software, spam filters, anti-spyware software and firewall to protect the computers.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 3: Email Cyber Threats
- Hint Sheet 01 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|-------------------------------|---|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students into the game. Make sure that the students have already talked to Omni and have a Cyberspace Pass as described in Lesson 1. (3 min)• Direct students to the CyberPort and have them talk to Carlo. Have students tell Carlo they have a Cyberspace Pass so he will unlock the Cyberspace Portal. (6 min)• Make sure all students enter Cyberspace. Direct them to Diagnostics and have them talk to Dr. Keen and take the tour. (6 min) | <ul style="list-style-type: none">• Start and log in to the game. Open PAL and click the Inventory tab. Check to see if they have a Cyberspace Pass.• Go back to the Atrium, and click on the door to the "Cyberport." Click Carlo and talk to him. Tell Carlo you have a Cyberspace Pass so he will unlock the Cyberspace Portal.• Enter Cyberspace and click on Diagnostics to enter the building. Click Dr. Keen and take the tour. Click on the malware to learn about them. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Hand out the worksheet and explain about Malware. Let students attempt quiz #1. (Worksheet, part 1) (5 min)• Share the answers to the quiz: Adware (#3), Trojan (#5), Spyware (#2), Virus (#4) and Worm (#1). Explain the tips for using anti-virus software, anti-spyware software and firewalls to protect your computer. (3 min)• Explain what spam is. (Worksheet, part 2) (2 min)• Lead students into the game again. Direct students to the "Message Center" and have them ask Trey to start the Level 1 training mission. Let students play the mission until they earn a gold badge. (15 min)<ul style="list-style-type: none">• Make sure all students earn a gold badge and unlock their first ReQuest with Alan.• Do not let students proceed to the ReQuest.• Students who finish the mission can shop at the Academy Store and decorate their room. | <ul style="list-style-type: none">• Read part 1 of the worksheet, and try quiz #1. If you need a hint, go back to the Hall of Quarantine in Diagnostics and click on the malware.• Check the answers and read the tips. Understand what anti-virus software, anti-spyware software and firewalls can do.• Leave Diagnostics and click the door of the Message Center. Talk to Trey and ask to start the Level 1 mission.<ul style="list-style-type: none">• Play the mission until you earn a gold badge.• After earning a gold badge, buy items from the Academy Store and decorate your dorm room. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Hand out Hint Sheet 01 to students. Make sure all students understand what spam is. (Hint Sheet 01) (5 min) | <ul style="list-style-type: none">• Read Hint Sheet 01. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define the cyber defense terms introduced in this lesson.
- Explain how cyber threats introduced in this lesson can destroy data, hardware and software.
- Take simple steps to protect a computer and data from cyber threats by using a spam filter and anti-virus software.
- Understand how a firewall works and the importance of installing a firewall.
- Navigate The MySecureCyberspace Game with ease.
- Enhance motor skills while navigating the game software.



Worksheet 3: Cyber Threats

Date:

Name:

1. What is Malware?

Malware is a software program that harms your computer. Adware, spyware, viruses, Trojan horses and worms are all types of malware.



Doctor Keen,
Diagnostics Lab
Technician

Quiz 1: Match the malware images to their definitions.



Adware



Trojan Horse



Spyware



Virus



Worm

A destructive program that can get into computers or networks and harm them by deleting, modifying or sending out the data.

A software program that secretly tracks what you do on the Internet and sometimes gets information about you from your computer.

A software program that causes advertisements to appear on your computer.

A software program that can wipe out information on your computer and create major problems.

A nasty program disguised as legitimate software.



Tip: To protect your computer from malware, install the most recent **anti-spyware** and **anti-virus** software. You also need to keep the software up-to-date to stay protected. Check with a trusted adult to see if your software is set up to automatically update itself.



Tip: A **Firewall** is a software program that protects your computer by acting like a security guard and monitoring and controlling the Internet traffic coming in and out of your computer. Install one and make sure it is always turned on.

2. What is Spam?

The Internet version of "junk mail," **Spam** is a message sent to a large number of users, usually to advertise something or to spread malware.



Trey, Message
Center Supervisor



Lesson 4: Cyber Crime (part 1)

Learning Objectives

- Increase students' cybersecurity vocabulary by introducing new words and definitions for cyber crime.
- Reinforce students' knowledge of email safety by completing the Spam ReQuest in the game.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed.
- Worksheet for Lesson 4: Cyber Crime (part 1)

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|-------------------------------|--|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students into the game and have them talk to Alan in the Atrium to do their first ReQuest. (8 min)<ul style="list-style-type: none">• Students who finish the ReQuest before their peers can buy items from the Academy Store and decorate their dorm rooms.• Hand out the worksheet and explain what cyber crime is. (Worksheet, part 1) (5 min) | <ul style="list-style-type: none">• Start and log in to the game and click Alan to talk to him. Give Alan advice on what he should do about spam.<ul style="list-style-type: none">• After completing the ReQuest, buy items from the Academy Store and decorate your dorm room. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Direct students to the Detention Center. Have students talk to Officer Ward and take the tour. (3 min)• Let students talk to all detainees to learn about their crimes. (10 min)• Have students talk to Officer Ward again. (3 min)• Have students enter the "Cyber Forensics Lab" and talk to Officer Ward again. (3 min)• Have students talk to Sparky. (3 min)<ul style="list-style-type: none">• Make sure students do not move on to the next room, "Officer Ward's Office." | <ul style="list-style-type: none">• Go to Cyberspace and click the arrow to Data Stream South. Visit the Detention Center and click Officer Ward to talk to him. Take the tour and talk to the four detainees in the Cell Block.• Talk to Officer Ward again and ask about Nils.• Click on the door to the "Cyber Forensics Lab" and talk to Officer Ward again.• Click Sparky to talk to him. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Have students use the PAL and attempt quiz #1 (Worksheet, part 2) (3 min)• Provide answers to the quiz: (2 min)<ul style="list-style-type: none">• Jax: <i>cyber bullying</i>• Ms. Information: <i>spreading misinformation</i>• Nils: <i>hacking, identity theft</i>• Elvirus: <i>distributing malware</i>• Sparky: <i>script kiddie, hacking</i>• Have students attempt quiz #2. (3 min)• Provide answers to the quiz: (2 min)<ul style="list-style-type: none">• Jax: <i>reporting to authorities, the cold shoulder</i>• Ms. Information: <i>reliable websites, cold shoulder</i>• Nils: <i>protecting personal information, firewalls</i>• Elvirus: <i>anti-virus software, the cold shoulder</i>• Sparky: <i>reporting to authorities</i> | <ul style="list-style-type: none">• Open the PAL and click on the "People" tab. Click on the "Cyber Criminals & Villains" button and read the bios. Read the worksheet and try quiz #1 & #2 using the PAL. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Distinguish between a safe and unsafe email by the title and sender.
- Identify online behavior that could lead to cyber crime, which would translate to protecting themselves from falling victims to such behavior.
- Define the cyber defense term introduced in this lesson.
- Understand the consequences of inappropriate online behavior.



Worksheet 4: Cyber Crime (part 1)

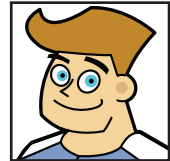
Date:

Name:

1. What is a Cyber Crime?

A cyber crime is a crime that is committed with the help of a computer or a communication device and a network.

Some examples include sending spam emails (spamming), stealing personal information (identity theft), breaking into someone's computer to view or alter data (hacking) and tricking someone into revealing their personal information (phishing).



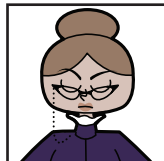
Officer Ward,
Detention Center
Security Officer

2. Cyber Criminals

Quiz 1: What cyber crimes did each detainee commit? If you don't remember what they said during the Detention Center tour, use your PAL and write them down in the boxes.



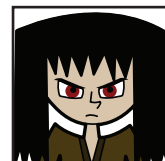
Elvira



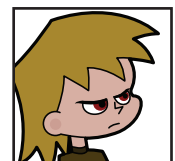
Ms. Information



The Master Hacker



Jax, Cyber Bully

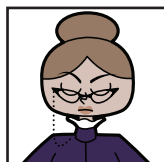


Sparky, Script Kiddie

Quiz 2: To stop their cyber attacks, you have to know their weakness. Use your PAL to find their weakness and write them down in the boxes.



Elvira



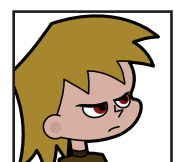
Ms. Information



The Master Hacker



Jax, Cyber Bully



Sparky, Script Kiddie



Tip: How can you tell if your computer has been attacked? Malware can affect your computer in a variety of ways. Your computer might process things more slowly than usual or otherwise malfunction or display many error messages. It might be unable to shut down or restart. Other signs include pop-up ads that you can't stop or close, or programs and web pages that launch on their own. If you see any of these signs on your computer, you should disconnect it from the Internet and tell a trusted adult right away.



Lesson 5: Cyber Crime (part 2)

Learning Objectives

- Provide students with information on what is considered to be a cyber crime.
- Raise students' awareness of the consequences of criminal behavior online.
- Reinforce safe online behavior and how to protect themselves and their personal data from cyber criminals.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 5: Cyber Crime (part 2)
- Hint Sheet 02 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|--|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students into the game and direct them to Officer Ward's Office at the Detention Center. Have students talk to Officer Ward to finish the tour. (5 min)• Have students click on the photos on the Wall of Shame in Ward's office. Have students use the PAL to learn about the rest of the cyber villains and their cyber crimes. (10 min)<ul style="list-style-type: none">• M.C. Spammer: <i>spamming</i>• The Dis Guys: <i>personal information theft</i>• Captain Jack Plunder: <i>cyber piracy</i>• The ID Bandit: <i>identity theft</i>• The Phisherman: <i>phishing</i> | <ul style="list-style-type: none">• Start and log in to the game, then go to Officer Ward's Office (CyberPort > Cyberspace Portal > Data Stream South > Detention Center > Cyber Forensics Lab > Officer Ward's Office). Click on Office Ward to talk to him and finish the tour.• Click on all of the photos on the Wall of Shame to see the cyber villains. Use your PAL to find out about the ones that are not detainees (PAL > People > Cyber Criminals & Villains). |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Hand out the worksheet to students and explain what phishing is. Have them read the phishing cartoon and discuss what might happen if Erika had submitted her personal information. (Worksheet, part 1) (7 min)• Explain what identity theft is and have the students read the cartoon. Discuss what some other consequences might be if your identity is stolen. (Worksheet, part 2) (7 min)• Explain what a cyber predator is, and have the students read the cartoon. Discuss what Dana could have done differently to protect herself from cyber predators. (Worksheet, part 3) (7 min) | <ul style="list-style-type: none">• Read the definition of phishing and the cartoon. Think about what might happen if Erika shares her bank information.• Read the definition of identity theft and the cartoon. Think about what other things could happen if your identity was stolen.• Read the definition of a cyber predator and the cartoon. Think about what Dana could have done differently to protect herself better. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Have each student think of one example of personal information and create a list of their examples on the classroom black/white board.• Hand out Hint Sheet 02 and discuss how protecting your personal information is an important way to protect yourself. (9 min) | <ul style="list-style-type: none">• Think what personal information is and come up with an example.• Read Hint Sheet 02 and talk about why protecting your personal information is important. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define the cyber defense terms introduced in this lesson.
- Understand the consequences of inappropriate online behavior.
- Understand what information to share and not to share online.
- Take simple measures to protect their offline identity.
- Understand how important it is to protect your personal information online.



Worksheet 5: Cyber Crime (part 2)

Date: _____

Name: _____

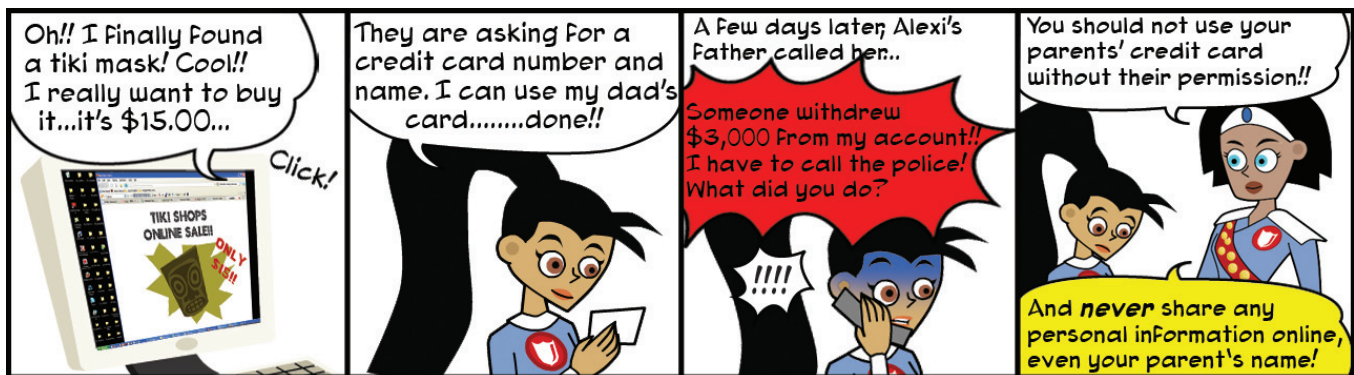
1. Phishing

Using a message to send people to a fake website that collects their personal information, such as their bank account or credit card information.



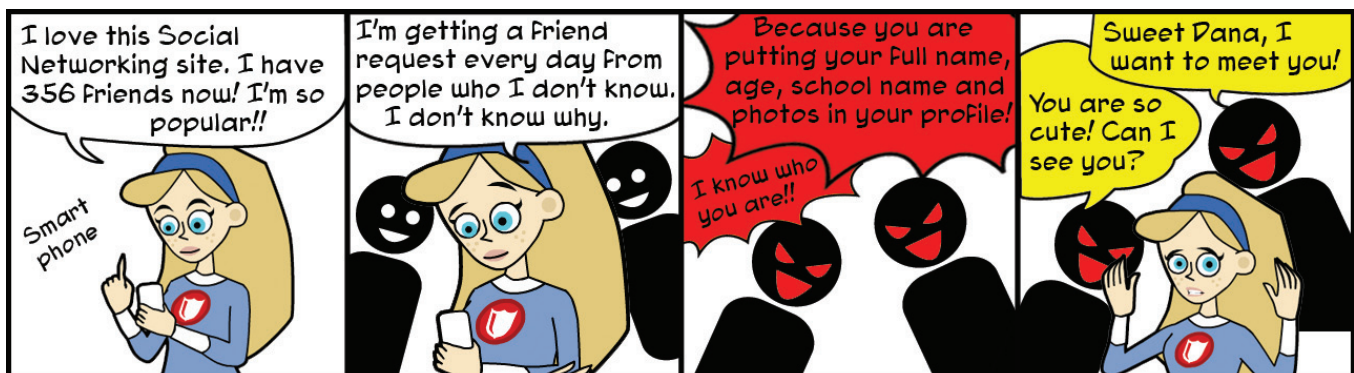
2. Identity Theft

Using somebody else's personal information to pretend to be them, usually to steal money from someone's bank account or to buy things with their credit cards.



3. Cyber Predator

Someone who uses the Internet to find young children, often because they want to meet the child in person and hurt them.





Lesson 6: Chat Rooms & Instant Messaging

Learning Objectives

- Introduce terms and definitions related to chat rooms and online communication.
- Increase students' awareness of chat room and instant messaging threats and reinforce how to protect their personal information.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 6: Chat Rooms & Instant Messaging
- Mask template from the Appendix, cardboard, decorative items, colored pencils/markers, and strings or rubber bands to tie the masks.

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|-------------------------------|---|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Hand out the worksheet and explain what an Alias is. Reiterate from Lesson 1 what makes a good username or alias. (Worksheet , part 1) (10 min) | <ul style="list-style-type: none">• Read the worksheet and talk about what makes a good or bad username. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Lead students into the game and direct them to the Clubhouse in Cyberspace. Have them talk to Betty and start their Level 1 training mission. (5 min)• Let students play the mission until they earn a gold badge. If students are unsure about the personal information, direct them to the Hint sheet 02 from lesson 5, also accessed with the Hint button. (20 min)<ul style="list-style-type: none">• Make sure all students earn a gold badge and unlock their second ReQuest with Dana.• Do not let students proceed to the ReQuest.• Students who finish the mission can either:<ul style="list-style-type: none">• Start the Alias mask decorating activity. (See the Appendix for a mask template) OR• Complete the exercises in the worksheet using Betty's blog at the Carnegie Cyber Academy website: http://www.carnegiecyberacademy.com/defenderBlogs/importanceOfAnonymous.html | <ul style="list-style-type: none">• Start and log in to the game, then go to the Clubhouse in Cyberspace (CyberPort > Cyberspace Portal > Data Stream North > Clubhouse). Click on Betty and ask to start the Level 1 training mission. Listen to her tutorial.• Play the mission until you earn a gold badge.• After earning a gold badge:<ul style="list-style-type: none">• Use markers and decorative items to create their Alias mask. Cut out the mask and tie on a string or rubber bands so you can wear it. OR• Complete the two exercises on the worksheet. Follow the instructions on the worksheet to locate Betty's blog on the Academy website and use it to help you fill in the blanks. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Students can complete their Alias mask or the worksheet for homework if they did not complete them in class. | <ul style="list-style-type: none">• Finish making the Alias mask or filling out the worksheet as homework. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Identify what personal information should not be shared in chat rooms and through text messaging.
- Define the cyber defense terms introduced in this lesson.
- Recognize and adhere to chat room safe behavior.
- Demonstrate recognition of questions that lead to revealing personal information in chat rooms and mechanism of abstaining from responding to such questions.
- Use motor skills necessary to complete the second mission, e.g. mouse, hold and drag game characters.



Worksheet 6: Chat Rooms & Instant Messaging

Date: _____

Name: _____

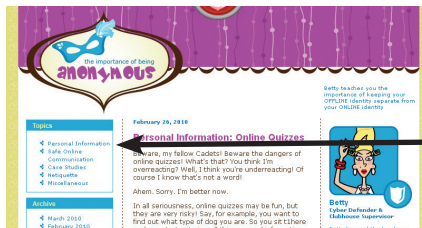
1. What is an Alias?

A name you use for your online identity on a computer or website. Also called a **username** or **screen name**. It should not contain your name as part of it or any information that could help people find you, such as your age, location or gender.



Betty,
Clubhouse
Supervisor

2. Personal Information



1. Open a web browser and go to the Carnegie Cyber Academy website: <http://www.CarnegieCyberAcademy.com>.
2. Click "Faculty Blogs" and open Betty's blog, "The Importance of Being Anonymous!"
3. Under "Topics" at the top left, click "Personal Information!"
4. Scroll down to the blog posts for April 7, 2009 and March 3, 2009.
5. Read these two blog posts and fill in the blanks in the following paragraphs.

Quiz 1: What information *can* you share online?

Share your _____, but not which _____ you have tickets for.

Share your _____, but not which _____ you take him to.

Share your _____, but not which _____ you go to all the time.

Share what _____, but not what _____ you play for.

Share which _____ you have read, but not which _____ is near your house.

Share your _____, but not if it's going to hurt someone's feelings or offend someone.

Share _____ of a squirrel, but not a picture of you acting squirrelly.

Quiz 2: Personal Information Filter: Before posting something, *ask yourself* these questions:

Can this information be used to _____ or _____ me offline?

Can this information make it easier for someone to _____ me, _____ my accounts, or _____ my identity?

Would I want this information to show up in a _____ for my name?

Is this something I wouldn't want _____ or _____ to see?

Is this information that someone could use _____ me in some way?

Is this information that only _____ should know?

Is this information that would help someone guess _____?

Would this information give someone _____ about me?

Is it going to be _____ if I can't take this information back?



Lesson 7: Netiquette

Learning Objectives

- Introduce new online terms and definitions.
- Introduce students to online netiquette.
- Reinforce protecting one's private information and respecting the online privacy of others.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 7: Netiquette
- Hint Sheet 06 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|-------------------------------|---|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students to the game and direct them to the Cafeteria to complete the ReQuest with Dana. (10 min)<ul style="list-style-type: none">• Students who finish the ReQuest before their peers can buy items from the Academy Store and decorate their dorm rooms. | <ul style="list-style-type: none">• Start and log in to the game and go to the Cafeteria. Click on Dana and offer to help her with her questions about personal information.<ul style="list-style-type: none">• After completing the ReQuest, buy items from the Academy Store and decorate your dorm room. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Hand out the worksheet and explain what Netiquette is. Let students read and discuss the cartoon and attempt question #1. (Worksheet, part 1) (5 min)• Discuss the differences between talking to friends or family over the Internet and talking to them in person and how it can be easy to misunderstand intentions in cyberspace.• Hand out Hint Sheet 06 and explain the details of Netiquette. Have students attempt questions #2 and #3. (Worksheet, part 1) (10 min)• Lead the students to the "Fun Stuff" page at the Carnegie Cyber Academy website: http://www.carnegiecyberacademy.com/funstuff.html• Have them play "Betty's Netiquette Quiz." Let them play until they get a score of 80% or higher. (10 min) | <ul style="list-style-type: none">• Read about Netiquette and think about the cartoon.<ul style="list-style-type: none">• Discuss the differences between talking with friends or family over the Internet and talking to them in person.• Think about and discuss what Erika and Alan should or shouldn't have done.• Read Hint Sheet 06 and think about the importance of Netiquette.• Go to the Carnegie Cyber Academy website's "Fun Stuff" page and play "Betty's Netiquette Quiz." |
| Reinforce (10 min) | <ul style="list-style-type: none">• Make sure that all students complete "Betty's Netiquette Quiz" and explain what it is to be a good cyber citizen. (5 min)<ul style="list-style-type: none">• Emphasize that it means being polite and having good manners when chatting, playing games with others, sending messages, and posting comments in Cyberspace. | <ul style="list-style-type: none">• Finish "Betty's Netiquette Quiz" and discuss the importance of being a good cyber citizen. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define the cyber defense terms introduced in this lesson.
- Demonstrate proper online communication behavior and respect of other cyber citizens.
- Demonstrate an understanding of online communication, cyber threats and protective measures.
- Apply safe behavior while using email, chat rooms, instant messaging and social networking sites.



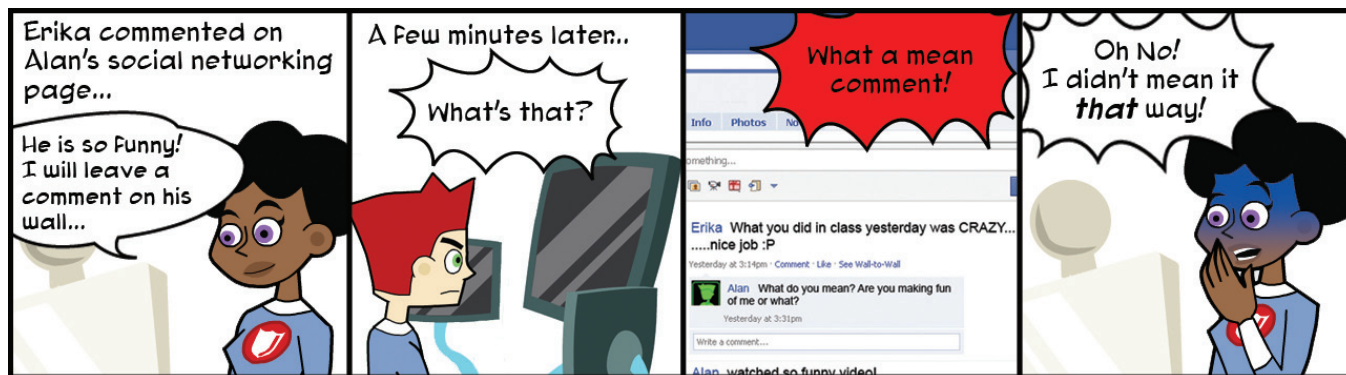
Worksheet 7: Netiquette

Date:

Name:

1. What is Netiquette?

Rules for how you should act in cyberspace. These rules help keep the Internet polite and help everyone get along.



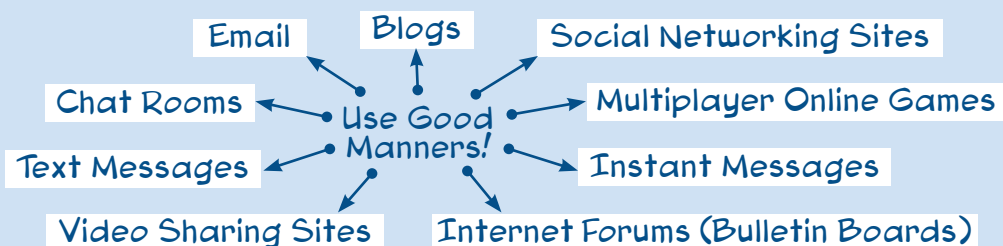
Quiz 1: What are the differences between talking to your Friends or Family over the Internet and talking to them in person?

Quiz 2: What could Erika have done to avoid this situation?

Quiz 3: What could Alan have done to avoid this situation?

2. Being a Good Cyber Citizen

Remember! To keep Cyberspace a safe, fun and happy place, you have to practice good netiquette everywhere in Cyberspace!



Betty,
Clubhouse
Supervisor



Lesson 8: Cyber Bullying

Learning Objectives

- Introduce cyber bullying and online harassment.
- Introduce cybersecurity issues related to cyber bullying.
- Raise students' awareness of appropriate online behavior towards others.
- Raise students' awareness about consequences related to cyber bullying and online harassment.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 8: Cyber Bullying
- Hint Sheet 04 and 05 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|---|--|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students into the game and direct them to the Clubhouse in Cyberspace. Have them talk to Betty and start their Level 2 training mission. (10 min)• Have students listen to the tutorial and ask Betty the questions about cyber bullying. | <ul style="list-style-type: none">• Start and log in to the game, then go to the Clubhouse in Cyberspace (CyberPort > Cyberspace Portal > Data Stream North > Clubhouse). Click on Betty and ask to start the Level 2 training mission. Listen to her tutorial and ask her all of the questions about cyber bullying. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Let students play the mission until they earn a gold badge and then have them complete the ReQuest with Carlo. (20 min)<ul style="list-style-type: none">• Make sure all students earn a gold badge and unlock their third ReQuest with Carlo.• Direct students to go to the CyberPort to complete the ReQuest with Carlo.• If the students complete both the mission and ReQuest, hand out Hint Sheets 04 and 05 for the students to read. | <ul style="list-style-type: none">• Play the mission until you earn a gold badge.• After finishing the mission, go to the CyberPort and talk to Carlo (Data Stream North > Academy Portal). Offer to help him with cyber bullying.• After completing the ReQuest, read Hint Sheets 04 and 05. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Make sure all students have completed the mission and ReQuest and have read the two Hint Sheets. Hand out the worksheet and discuss questions 1-3 with them. (Worksheet, part 1) (7 min)• Discuss strategies for protecting yourself from cyber bullying and avoiding becoming a cyber bully yourself with students. (Worksheet) (3 min) | <ul style="list-style-type: none">• Read the worksheet and the three questions. Think about what Alan and his classmates could have done differently to prevent the situation from becoming worse.• Think about ways to protect yourself from cyber bullying and ways that you might become a cyber bully, even if it is unintentional. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Demonstrate an understanding of cyber bullying and the electronics mediums used in cyber bullying.
- Follow a few basic cybersecurity steps to secure their private information online.
- Understand the importance of privacy and keeping their personal information private.
- Understand the consequences of cyber bullying and the effect on the victim.
- Understand how to deal with cyber bullying and how to protect yourself from cyber bullying.



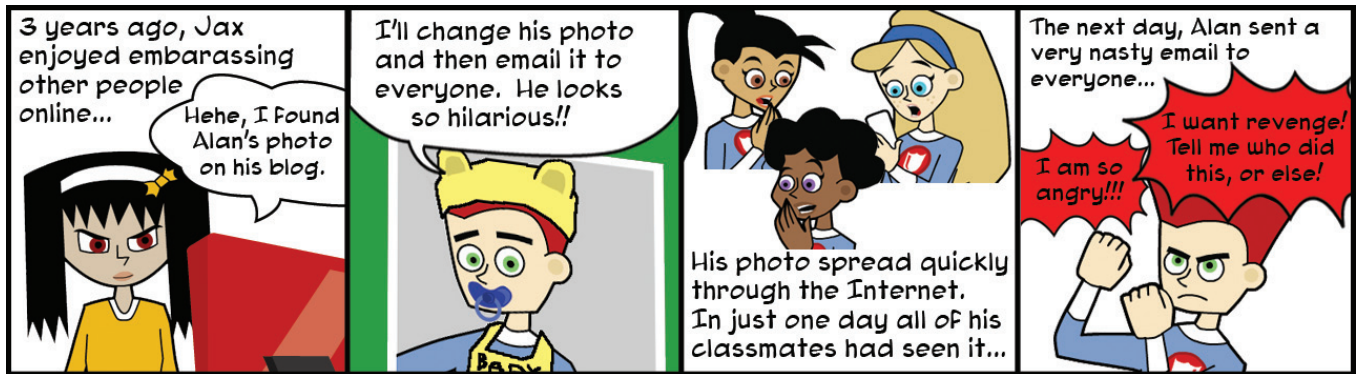
Worksheet 8: Cyber Bullying

Date:

Name:

1. Cyber Bullying

Cyber bullying is the use of the Internet to harass, intimidate, embarrass or demean others.



Quiz 1: What Jax did is considered cyber bullying, but Alan could have prevented this incident from happening. What could Alan have done differently to protect himself?

Quiz 2: What could Alan's classmates have done differently to help and prevent the email from spreading more?

Quiz 3: Alan's anger is understandable, but revenge will not solve the problem. What could Alan have done instead?

2. Protect Yourself From Cyber Bullying

1. Do not share your personal information in cyberspace, especially photos and videos of yourself
2. Never share your password with anyone except a trusted adult, no matter how close of a friend they are.
3. Never respond to a cyber bully and do not believe everything that is posted online.
4. Never send impulsive messages when you are angry or bored. You could end up saying something that you will regret later.
5. Tell a trusted adult about any cyber bullying and report it to authorities.
6. Save emails or other evidence of cyber bullying for when you report it.



Betty,
Clubhouse
Supervisor



Lesson 9: Online Data

Learning Objectives

- Introduce terms and definitions related to websites.
- Provide students with basic knowledge on how to distinguish safe and credible websites.
- Raise students' awareness of safety steps to take when using a search engine.

Materials You Will Need

- Computers that have a web browser installed
- Worksheet for Lesson 9: Online Data
- Writing utensils

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|-------------------------------|--|--|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Hand out the worksheet and explain the cyber defense terms. Have students fill in the blanks on the worksheet. (Worksheet, part 1) (10 min)<ul style="list-style-type: none">• URL: <i>the address of a website</i>• Home page: <i>the main page of a website</i>• Web page: <i>a document on the Internet that you can view with a web browser</i>• Website: <i>a collection of web pages</i>• Web browser: <i>a software program that you use to "surf the Web"</i> | <ul style="list-style-type: none">• Listen to the definitions of the cyber defense terms and fill in the blanks on the worksheet. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Direct students to open a web browser and navigate to an acceptable search engine. Have them search for information on the "Egyptian Pyramids." (5 min)• Explain the strategies for determining if a website is reliable. (Worksheet, part 2) (10 min)• Have students examine their search results. As a class, visit each website and discuss what you find. (10 min)<ul style="list-style-type: none">• Discuss what makes an author credible• Discuss how the date something was published might affect its credibility• Discuss what it means for a site to look "professional" (few advertisements, correct information, no typos, good design) | <ul style="list-style-type: none">• Open a web browser and visit a search engine. Type "Egyptian Pyramids" in the Search box and click the Search button.• Read part 2 of the worksheet and understand how to evaluate the websites.• Visit each website in the search engine results and determine which websites are reliable by using the check list on the worksheet.<ul style="list-style-type: none">• Discuss the evaluation criteria with the class as you evaluate each site. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Discuss why Wikipedia might not be considered credible but how it can be used to find other resources. (3 min)• Read through the checklist in the worksheet one more time with students (Worksheet) (2 min) | <ul style="list-style-type: none">• Discuss Wikipedia's reliability as a resource and other ways you can use it.• Read the worksheet again. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define the cyber defense terms introduced in this lesson.
- Understand the risk associated with visiting non credible websites.
- Apply critical thinking online skills in assessing websites to visit.
- Demonstrate effectively the use of a search engine to locate a website or web address.
- Recognize safe online behavior when searching for a web address, e.g. visiting a site of a well-known company.



Worksheet 9: Online Data

Date:

Name:

1. Cyber Defense Terms

The address of a website. The Carnegie Cyber Academy's is: <http://www.carnegiecyberacademy.com>.

a) The main page of a website.
b) The page that loads in your web browser when you open it.

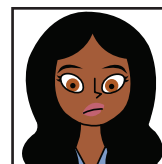
A document on the Internet that you can view with a web browser. They can contain words, pictures and links.



A collection of related Web pages.

A software program that you use to "surf the Web." Some popular ones include Internet Explorer, Firefox and Safari.

The Internet can be a great resource as long as you know how to use it. You can learn how to judge if a site is a good or bad resource.



Maya,
Databank
Supervisor

2. Is it Safe? Is it Credible?

When doing research, you need to determine whether or not a website is a safe and reliable resource. Ask yourself these questions:

1. Who wrote this?

Check to see if the website has an author or an organization that runs it. Real news articles and other publications usually have the authors' name listed. Try to determine if the author would be considered an expert on the topic they are writing about.

2. Where did they get their information?

Look for sites that include lists of references and source materials, which will explain where the author found the information. If you can, check the references and source materials they list to make sure those are also reliable.

3. How old is this?

Find out when the website was created and when it was last updated. Sometimes old information can be incorrect, especially if it is related to current events.

4. What kind of domain is it?

The domain is the last part of the URL. Typically .gov sites are government sites, .edu sites are educational sites, like a school or college, and .org sites are usually non-profit organizations, like churches and museums. These are more likely to be reliable sites.

5. Does it look professional?

Reliable sites are usually up-to-date and look very professional. If a site is full of errors, such as typos and broken links, and inconsistencies, such as images and advertisements that don't relate to the content, it is much less likely to be a reliable site.



Lesson 10: Website Dangers

Learning Objectives

- Introduce terms and definitions of cyber threats related to accessing websites.
- Introduce students to a few safe computing steps to take when accessing websites.
- Reinforce the consequences of cyber threats to computers, data and people.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game installed
- Worksheet for Lesson 1: Website Dangers
- Writing utensils.

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|---|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Lead students into the game and direct them to the Databank in Cyberspace. Have them talk to Maya and start their Level 1 training mission. Make sure the students understand the four website dangers: (10 min)<ol style="list-style-type: none">1. <i>Links that download files</i>2. <i>Forms</i>3. <i>Advertisements</i>4. <i>That icky feeling (inappropriate content)</i> | <ul style="list-style-type: none">• Start and log in to the game, then go to the Databank in Cyberspace (CyberPort > Cyberspace Portal > Data Stream North > Databank). Click on Maya and ask to start the Level 1 training mission. Listen to her tutorial. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Let students play the mission until they earn a gold badge and unlock their third ReQuest with Erika. (20 min)<ul style="list-style-type: none">• Make sure all students get a gold badge and unlock the ReQuest with Erika.• Do not let students proceed to the ReQuest.• Students who finish the mission before their peers can buy items from the Academy Store and decorate their dorm rooms. | <ul style="list-style-type: none">• Play the mission until you earn a gold badge and unlock the ReQuest with Erika.<ul style="list-style-type: none">• After earning a gold badge, buy items from the Academy Store and decorate your dorm room. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Hand out the worksheet and have students attempt question #1. If they are unsure about the four dangers, direct them back to the Databank and ask Maya. (Worksheet, part 1) (3 min)• Have students read the "If you encounter ..." chart. (Worksheet, part 2) (7 min)<ul style="list-style-type: none">• Discuss how you might tell if your computer has become infected with malware.• Discuss what to do if you think your computer is infected with malware. | <ul style="list-style-type: none">• Read the worksheet and fill in the blanks for the four website dangers.<ul style="list-style-type: none">• If you need help, return to the Databank in the game and ask Maya.• Read the "If you encounter these website dangers" chart and discuss what you can do if your computer becomes infected with malware. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Identify cyber threats associated with accessing new websites.
- Define new cyber defense terms associated with cyber threats.
- Follow some basic steps of safe computing when visiting a new website or when faced with an online advertisement.
- Take caution when asked for personal information online or when solicited with a free download.
- Enhance motor skills required to navigate game software.



Worksheet 10: Website Dangers

Date:

Name:

1. Website dangers

Quiz 1: What are the Four website dangers, according to Maya?

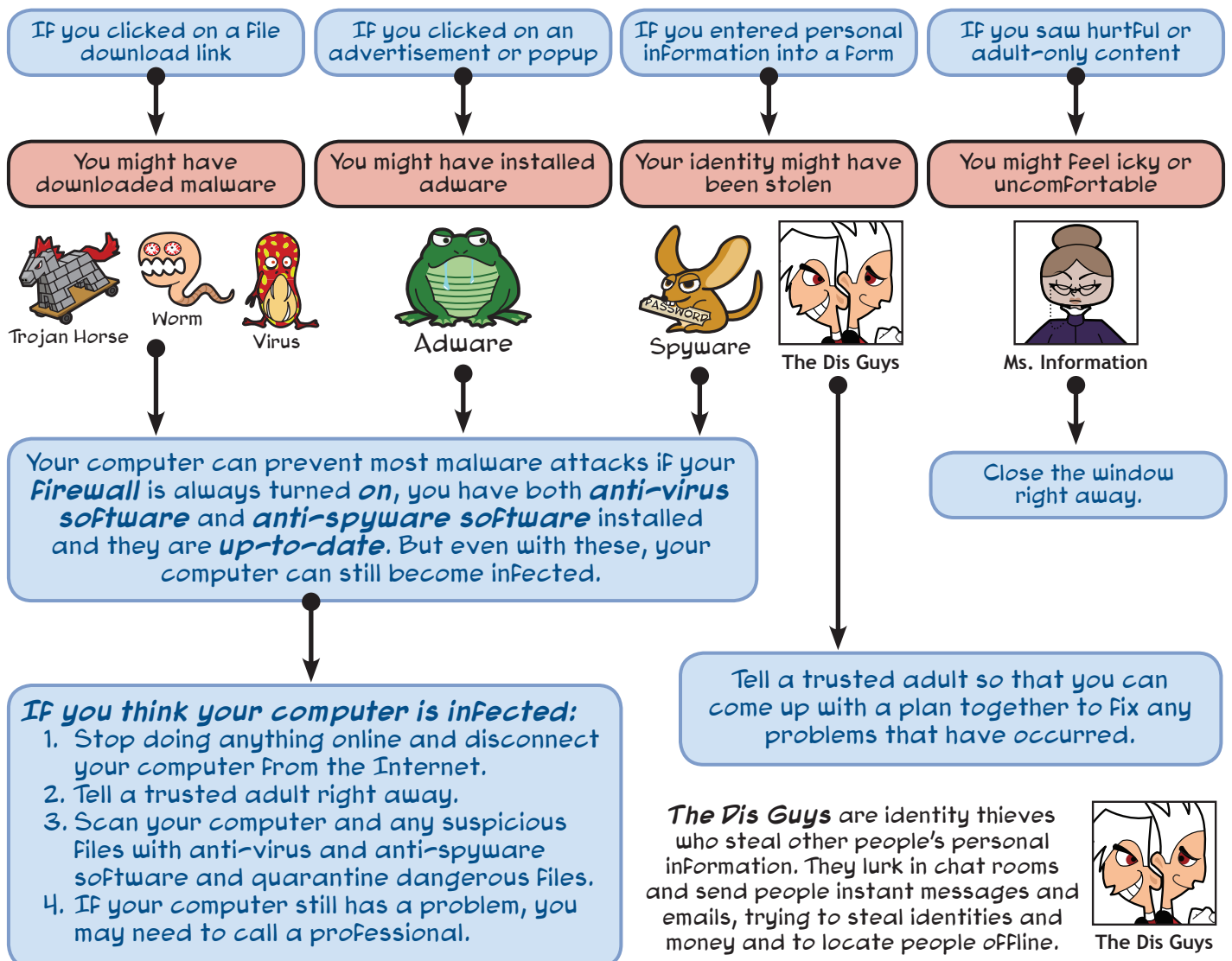
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Maya,
Databank
Supervisor

2. If you encounter these website dangers...

Protect your computer from these dangers by **not clicking on advertisements or File download links** and **asking a trusted adult before Filling out any Forms**. But just in case you accidentally do, refer to this chart:





Lesson 11: Search Engines & Research Tips

Learning Objectives

- Introduce new online research terms and definitions.
- Provide students with basic knowledge for how to be safe when searching the Internet for information.
- Provide effective and safe research tips.
- Enhance students' motor skills while navigating the game.

Materials You Will Need

- Computers with Carnegie Cadets: The MySecureCyberspace Game and a web browser installed
- Worksheet 11: Search Engines and Research Tips
- Writing utensils
- Hint Sheet 03 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|---|--|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Hand out Hint Sheet 03, and remind students what the four website dangers are (also addressed in the previous lesson). (Hint Sheet 03) (5 min)• Lead students into the game and direct them to the West Dorm Rooms to complete the ReQuest with Erika. (10 min)<ul style="list-style-type: none">• Students who finish the ReQuest before their peers can buy items from the Academy Store and decorate their dorm rooms.• Hand out the worksheet and read "What is a search engine?" and then "How to research with a search engine." (Worksheet, parts 1, 2) (10 min) | <ul style="list-style-type: none">• Remember what the four website dangers are. Read Hint Sheet 03 and make sure you understand them.• Start and log in to the game, then go to the West Dorm Rooms (Atrium > West Dorm Rooms). Talk to Erika and offer to help her with pop-ups.<ul style="list-style-type: none">• After completing the ReQuest, buy items from the Academy Store and decorate your dorm room.• Read "What is a search engine" and "How to research with a search engine" on the worksheet. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Direct students to open a web browser and navigate to an acceptable search engine. Have them attempt the search engine challenge on the worksheet. While they search, make sure they are using the reliable sites. (Worksheet, part 3)(10 min)<ul style="list-style-type: none">• <i>George Washington was born on Feb. 22, 1732</i>• <i>There are eight planets in the Solar System</i>• <i>The capital of New York state is Albany</i>• <i>The scientific name for humans is Homo Sapiens</i>• <i>Leonardo DaVinci painted the Mona Lisa</i> | <ul style="list-style-type: none">• Use the search engine to search for the answers to the questions on the worksheet. Find reliable websites and write down the answers in the worksheet. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Discuss the four website dangers and how to determine if a website is reliable again with students (addressed in lesson 9). (10 min) | <ul style="list-style-type: none">• Discuss the four website dangers and how to recognize safe and reliable websites again. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Demonstrate the effective use of a search engine to locate a website or web address.
- Follow basic safe computing steps when using a search engine.
- Understand how a search engine works.
- Understand cyber threats caused by accessing unwanted websites and measures of protection.
- Use information on safe computing presented in this lesson and previous lessons in making decisions about websites they come across while using a search engine.



Worksheet 11: Search Engines & Research Tips

Date:

Name:

1. What is a search engine?

A website that lets you search for web pages and other documents on the Internet that contain a certain word or phrase. Examples: www.google.com, www.yahoo.com, www.bing.com and www.ask.com.



Maya,
Databank
Supervisor

2. How to research with a search engine

1. Figure out what you need to know.

It helps to start out by writing down everything you



already know about your topic and what you think you may need to know for your report. If you don't know anything about your topic, you can also try an encyclopedia website like "Encyclopedia Britannica," or talk to a librarian or your teacher.

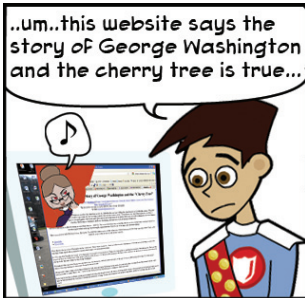
2. Combine keywords to focus your search.

If you just search for "George Washington," you will find lots of information that might not be necessary for your report. Use several keywords inside "quotation marks" to focus your search results and use what you learn on one site to help focus your next search.



3. Double-check your information.

Look for sites that list their references and source materials, which will explain where the author found the information. Always double-check the information you find on the Internet against an offline trusted resource to make sure it is correct. Do not be fooled by Ms. Information!



4. Bookmark reliable sites.

When you find a site that is a good resource, add it to your web browser favorites or bookmarks so you can find it again easily. You never know when you will need it again, and sites you know to be reliable are a great place to start when researching a new topic.



When you use a search engine, you must be accurate when you spell or paraphrase the topic you seek! If you misspell a word, the search engine will not find websites that are helpful and could even lead you to a risky website that could install malware on your computer.



Maya,
Databank
Supervisor

3. Search engine challenge!

1. When was George Washington born?
2. How many planets are in the Solar System?
3. What is the capital of New York state?
4. What is the scientific name for humans?
5. Who painted the Mona Lisa?

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Lesson 12: Copyright and Plagiarism

Learning Objectives

- Introduce students to copyright issues.
- Introduce new terms and definitions.
- Emphasize illegal actions a student could take when using information from the Internet.
- Provide students with safe computing steps when searching and using information over the Internet.

Materials You Will Need

- Worksheet 12: Copyright and Plagiarism
- Cards for the “Flip the Card” game (located in the Appendix). Print and cut them out before class.
- 16 tennis balls labeled with the “Threat and Safe” words (located in the Appendix.) Print on sticker paper to make them easy to stick to the tennis balls.
- Two baskets labeled “Threat” and “Safe.”

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|---|---|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Hand out the worksheet to students and explain what copyright is. Have them read the cartoon and discuss copyright. (Worksheet, part 1) (7 min)<ul style="list-style-type: none">• Explain why copyright is important.• Explain how to appropriately use information and data.• Explain what plagiarism and cyber piracy are and have students read the cartoon and discuss plagiarism and cyber piracy. (Worksheet, part 2) (8 min)<ul style="list-style-type: none">• Emphasize that both activities are illegal and can lead to severe consequences. | <ul style="list-style-type: none">• Read about copyright and read the cartoon. Discuss how to appropriately use information and data from the Internet.• Read about plagiarism and cyber piracy and read the cartoon. Discuss the consequences of plagiarism and cyber piracy. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Distribute one “Flip the Card” card to each student. Have each student read their card out loud and have the class decide together if the action is legal or illegal. Discuss their answers. (13 min)• Distribute the 16 tennis balls among the students. Have each student decide if the item is Safe or a Threat and toss the ball into the appropriate basket. If the student is unsure, have them place the ball between the two baskets and decide as a class where it belongs. Discuss their answers. (12 min) | <ul style="list-style-type: none">• Get a flip card. When it is your turn, read your card out loud and ask the class if it is legal or illegal.• Get a labeled ball. When it is your turn, read the label out loud and toss the ball into the appropriate basket. If you are unsure, place the ball between the baskets and ask the class. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Have the students read the last section of the worksheet, “Using the Internet for Research,” and discuss how to use it safely and appropriately. (Worksheet, part 3) (5 min) | <ul style="list-style-type: none">• Read the worksheet and discuss how to use the Internet safely and appropriately. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define new terms presented to them in this class.
- Recognize legal and illegal actions when taking information over the Internet.
- Use sound judgment before accepting free offers over the Internet.
- Use sound judgment before downloading music, images or movies over the Internet.
- Understand the consequences of plagiarism and cyber piracy.
- Recognize safe behavior when browsing and using information over the Internet.



Worksheet 12: Copyright and Plagiarism

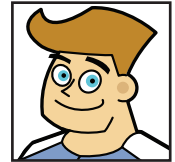
Date: _____

Name: _____

1. What is Copyright?

Copyright is the creator's right of ownership to original material, such as an essay, web page, picture or song. It gives the creator the right to take legal action against someone else who steals the material or claims they created it.

Violating a copyright is illegal. Don't use information from the Internet without citing who the author is. Don't download songs, games and movies that are copyrighted.



Officer Ward,
Detention Center
Security Officer

I want to use their data for my Web site. But I know I can't use it because of copyright.

Ecosystem Information
Copyright©2010
Ecosystem Research, Inc.
All rights reserved.

Alexi, that's good response. But most Web sites will give you permission to download and copy thier information if you....

Request permission, or give credit to the author and Web site and....

Put quotation marks around the information you had copied and pasted with reference to the Web site and author

"Cyberpiracy is any instance where the Internet is used to copy a digital document without authorization."
My SecureCyberspace,
Carnegie Mellon University

2. Plagiarism and Cyber Piracy

Plagiarism is using someone else's ideas or writing and claiming that it is yours.

Cyber Piracy is when you use a computer to copy or share materials that are protected by copyright without the creator's permission.

You can't just copy and paste someone else's work. Plagiarism is illegal.

And downloading songs, movies, images and games for free when they cost money in the store is also illegal.

"But," you might say, "No one will ever find out..."

Not really, young cadets! Thinking that you won't get caught is foolish.

Every file download is recorded and everything you do online can be traced.

These activities could lead to jail, a large fine and trouble with the law!

3. Using the Internet For Research

Keep the following in mind when you use the Internet for research:

1. Use search engines wisely and effectively.
2. Look for safe and reliable websites.
3. Stay away from the four website dangers.
4. Do not use information and data from the Internet without giving the author credit.



Maya,
Databank
Supervisor



Lesson 13: Cell Phones

Learning Objectives

- Introduce the risks and manners of cell phones and related terms.
- Provide strategies for the safe usage of mobile devices.
- Raise students' awareness of appropriate behavior related to mobile devices.

Materials You Will Need

- Worksheet 13: Cell Phones

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|--|--|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Ask students how many own a cell phone, and ask them when and how they use it (for example, texting with friends or talking to their parents).• Hand out the worksheet and have students read the first section about cell phone risks. (Worksheet, part 1) (5 min) | <ul style="list-style-type: none">• Raise your hands if you have your own cell phone and answer when and how you use it.• Read part 1 of the worksheet. |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Have students read the “Cyber Bullying” cartoon in the worksheet. Referring to what they learned in lesson 8 about cyber bullying, discuss the following questions: (Worksheet, part 1) (15 min)<ol style="list-style-type: none">1. What could they have done differently?2. If you received a nasty text message from your friends, what should you do?• Have students read the “Sharing Media with Cell Phones” cartoon and discuss the following questions: (Worksheet, part 1) (10 min)<ol style="list-style-type: none">1. What kind of websites might media from a cell phone be posted to? (<i>YouTube, Facebook, MySpace...</i>)2. In addition to not sharing photos or videos, what can you do to protect yourself when using your cell phone? (<i>Only give out your phone number to your closest friends and family, do not reply to text messages or phone calls from strangers, do not share personal information with your phone...</i>) | <ul style="list-style-type: none">• Read the cartoon and discuss the questions.• Read the cartoon and discuss the questions. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Have students read the last section about cell phone manners. Discuss the hidden costs of having a cell phone and your school's policy for cell phone usage. (Worksheet, part 2) (10 min) | <ul style="list-style-type: none">• Read part 2 of the worksheet and discuss. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Identify and recognize the risks of using cell phones.
- Understand the importance of manners when using cell phones.
- Take simple steps to protect themselves from cyber threats when using cell phones.
- Apply critical thinking skills to solve problems related to cell phone usage.



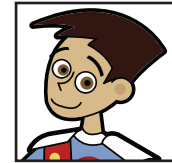
Worksheet 13: Cell Phones

Date:

Name:

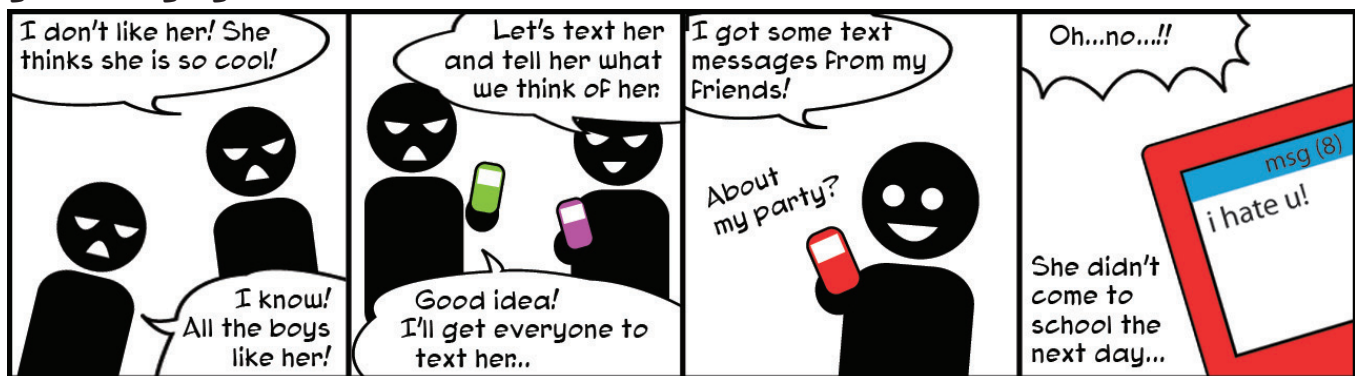
1. Cell Phone Risks

Cell phones and mobile phones are a great technology for communicating with your Family and Friends. But there are risks, just like with the Internet. These risks include **cyber bullying, sharing too much information, cyber predators, hidden costs** and **inappropriate content**. Be aware of them, and use your cell phone wisely and safely.

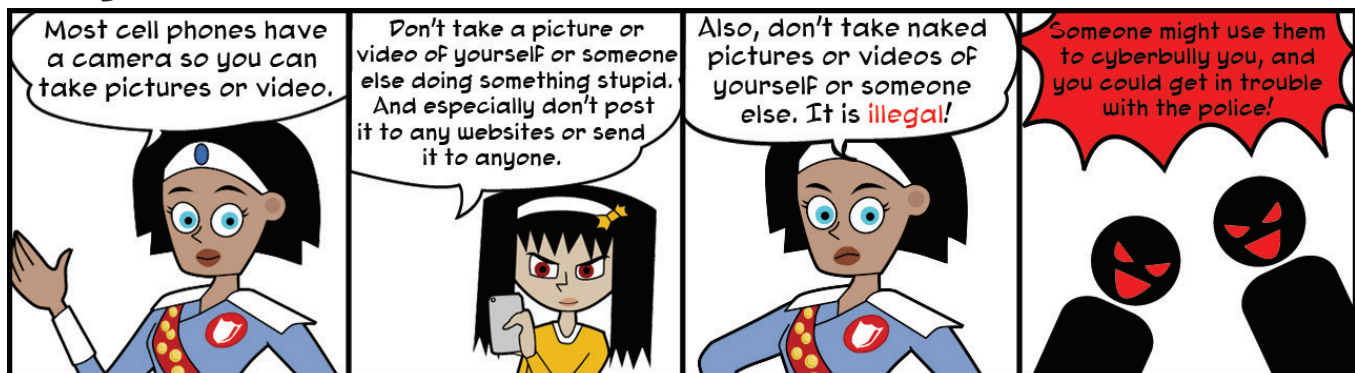


Carlo,
CyberPort
Technician

Cyber Bullying with a Cell Phone



Sharing Media with Cell Phones



2. Cell Phone Etiquette

1. Watch for hidden costs

Sending and receiving text messages can become very expensive if you don't have an unlimited plan. Make sure you know how many minutes and texts you are allowed to send or receive every month.

2. Not anytime, not anywhere

Obey your school's cell phone policy. Switch your phone to silent when you are in a quiet place like the library or a movie theater and leave the room to answer it. It's also rude to answer a call or text when you are talking to someone else - if it's important, excuse yourself politely first.

3. It's the same Cyberspace

Some cell phones, such as smartphones, are just like a small mobile computer and can connect to the Internet. The rules for cyberspace are the same whether you are accessing it from a computer or a smart phone. Remember, be safe in cyberspace and be a good cyber citizen!



Lesson 14: Online Reputation

Learning Objectives

- Introduce cyber safety concepts of safe behavior when sharing online and using a social network.
- Raise the player's awareness on issues related to having an online reputation and the use of social networking sites.
- Raise the player's awareness about consequences related to having a negative online reputation and the misuse of social networking sites.

Materials You Will Need

- Computers with a web browser installed
- Worksheet for Lesson 14: Online Reputation
- Writing utensils
- Hint Sheets 05 and 07 from the Appendix

Classroom Activities (Duration: 45 minutes)

| Timeline | Teacher Instructions | Student Activities |
|--------------------------------------|--|--|
| Introduce Concepts (15 min) | <ul style="list-style-type: none">• Ask students "What is an Online Reputation?" (3 min)• Lead the students to the "Cyberspace Communications" faculty page at the Carnegie Cyber Academy website: http://www.carnegiecyberacademy.com/facultyPages/cyberspaceCommunications.html• Have them launch the game "Growing an Online Reputation" and read the instructions. (5 min)• Hand out the worksheet and have students attempt the questions in Part 1 (7 min) | <ul style="list-style-type: none">• Click the "Next" button to progress through the instructions for "Growing an Online Reputation"• Refer to the instructions to answer Part 1 on the worksheet, "Managing your Online Reputation". |
| Develop and Practice (20 min) | <ul style="list-style-type: none">• Let students play the game. (20 min)<ul style="list-style-type: none">• Make sure they roll over the branches to get feedback on their answers.• Remind students that the "Hint" button is available if they need help.• After answering all the questions, students can replay each branch (or start to grow the plant again) to try for a better score. | <ul style="list-style-type: none">• Click the "Grow your Online Reputation" button on the last screen of the instructions to start the game. |
| Reinforce (10 min) | <ul style="list-style-type: none">• Have students read Part 2 of the worksheet: "Damaging your Online reputation." Discuss Erika and Dana's situations. (5 min)• Have students read Part 3 of the worksheet: "How can you fix a damaged online reputation?"• Hand out Hint Sheet 07, "Growing a Positive Online Reputation," and Hint Sheet 05, "Tips for Reporting Cyberbullying." Discuss discovering and reporting damage to your online reputation and cyberbullying. (5 min) | <ul style="list-style-type: none">• Read Part 2 of the worksheet and discuss what Erika and Dana should have done to avoid these situations.• Read Part 3 of the worksheet• Read the two Hint Sheets and discuss ways to discover and report damage to your online reputation. |

Learning Outcomes

At the end of this lesson, students will be able to:

- Define what an online reputation is.
- Understand the importance of having a positive online reputation.
- Understand the consequences of a negative online reputation.
- Understand how to grow, manage, and repair their online reputation.
- Use sound judgment before accepting friends and sharing information with them.



Worksheet 14: Online Reputation

Date: _____

Name: _____

1. Managing your Online Reputation

_____ share things that would _____ your reputation as a good student, a good friend, and a team player.

_____ share things that would _____ your reputation as a good friend and a respectable and trustworthy person.





_____ share things that will make you a _____ for weirdo strangers or bullies.

Be _____ about whom you _____ with your reputation when you add them to your friends and share things with them.





_____ for others damaging your reputation and _____ to minimize the damage.

2. Damaging your Online Reputation

Sharing something inappropriate

| | | | |
|---|---|---|--|
| <p>Erika took a picture of herself wearing a skimpy outfit.</p>  | <p>Looks good! I'm going to post this on my wall so everyone can see!</p>  | <p>The Academy Scholarship committee checked her Social Network profile when judging her application.</p> <p>Oh, my...</p>  | <p>Her application was rejected because of the inappropriate photo.</p> <p>But my friends said I looked good in that picture!! Why?!</p>  |
|---|---|---|--|

Sharing your opinion

| | | | |
|---|--|---|---|
| <p>Dana loves microblogging every day to talk about her classmates.</p> <p>I liked Sofia's hairstyle!</p>  | <p>"But Olivia's hair was so funny today. She really should change it, she looks like a nerdy hedgehog! LOL!!"</p> <p>Click!</p> <p>Click!</p>  | <p>Dana was just trying to be funny. But...</p> <p>That comment was hurtful. It's cyberbullying!</p>  | <p>Dana's blog created a flame war and people spread her mean comments throughout Cyberspace.</p> <p>Dana's carelessness damaged her own online reputation and made her a cyberbully!</p>  |
|---|--|---|---|

3. How can you fix a negative online reputation?

Once your online reputation has been damaged, it's not easy to fix because it's everywhere in Cyberspace. If someone else damaged it, you can report it to a trusted adult. But if you damaged it yourself, act immediately. Delete or correct what you posted, apologize if you need to, and be a good cyber citizen!



Betty,
Clubhouse
Supervisor

My Alias

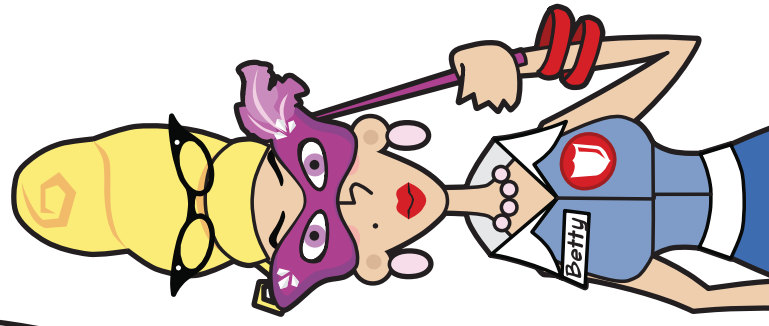
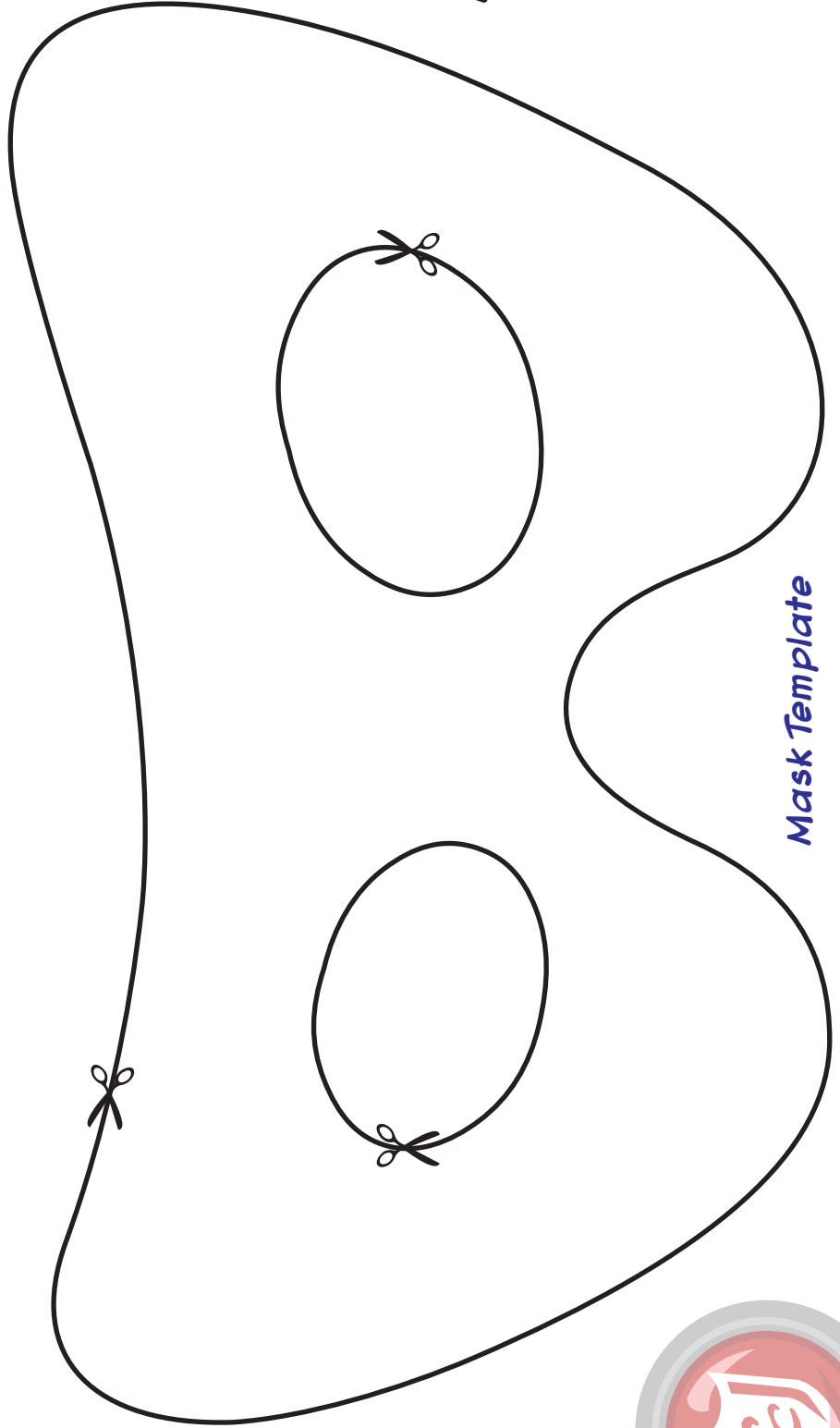
Create an Alias to
wear as a mask to
protect your Real or
Offline Identity

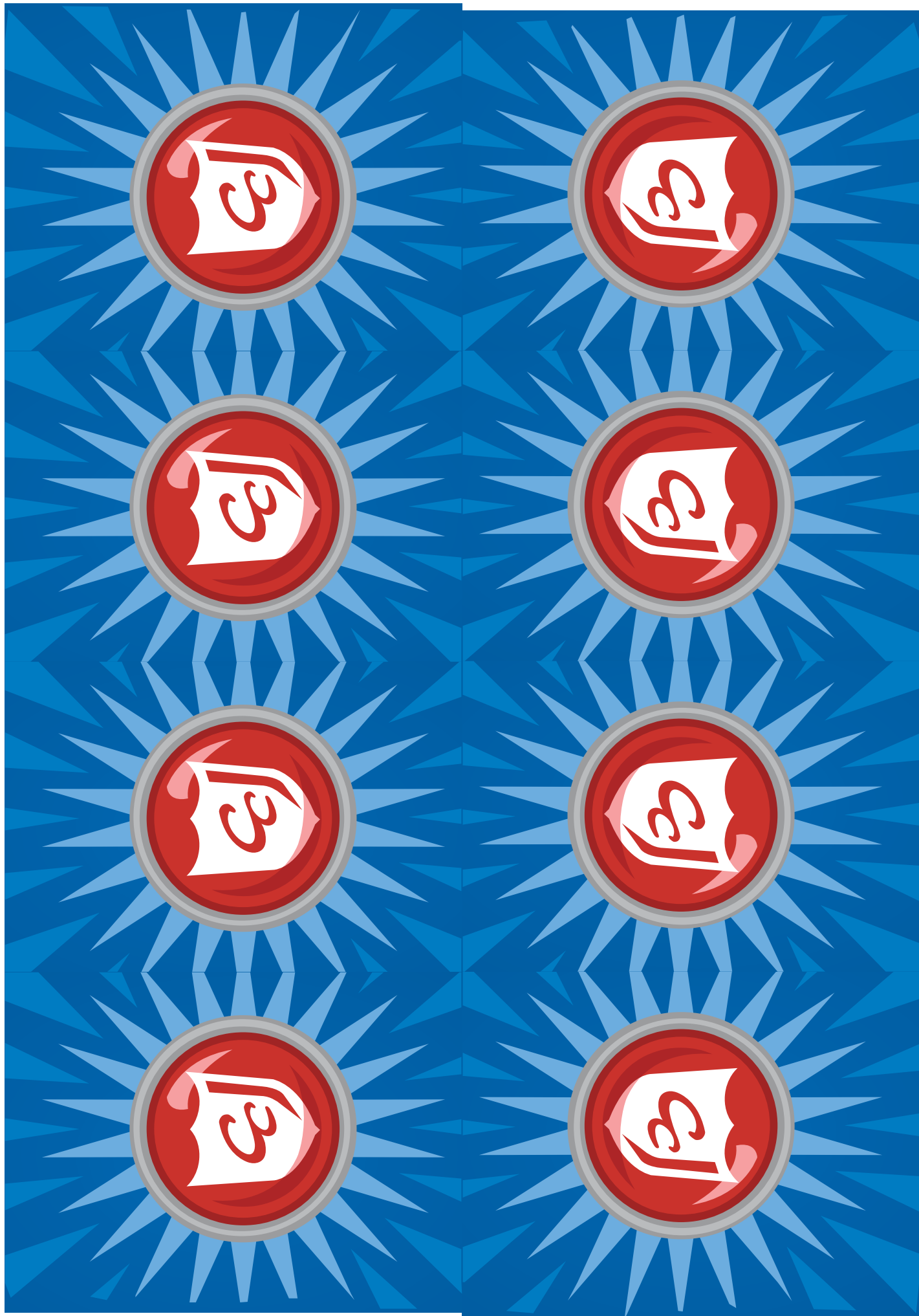
You will need:

- Cardboard or Heavy Paper
- Glue
- A Popsicle Stick
- Things to decorate with
(markers, feathers, glitter, foil...)

Directions:

- 1 Glue the Alias Mask Template to a piece of Cardboard or Heavy Paper:
- 2 Cut out the mask. You may need help with the eyes.
- 3 Glue the Popsicle Stick to the back of one side of the mask for a handle.
- 4 Decorate your Alias Mask any way you want!





Is the following action
LEGAL or **ILLEGAL**?

Downloading movies
onto your computer

5

Is the following action
LEGAL or **ILLEGAL**?

Making a copy of
software that your
friend bought

6

Is the following action
LEGAL or **ILLEGAL**?

Posting a Hate List
online of students
you don't like at
school

7

Is the following action
LEGAL or **ILLEGAL**?

Sending 50 text
messages a day to
a boy or girl you
like at school

8

Is the following action
LEGAL or **ILLEGAL**?

Claiming you are 18
years of age when
registering on a
Web site

4

Is the following action
LEGAL or **ILLEGAL**?

Copying some text
from the Internet
for a class project
and giving credit to
the author

3

Is the following action
LEGAL or **ILLEGAL**?

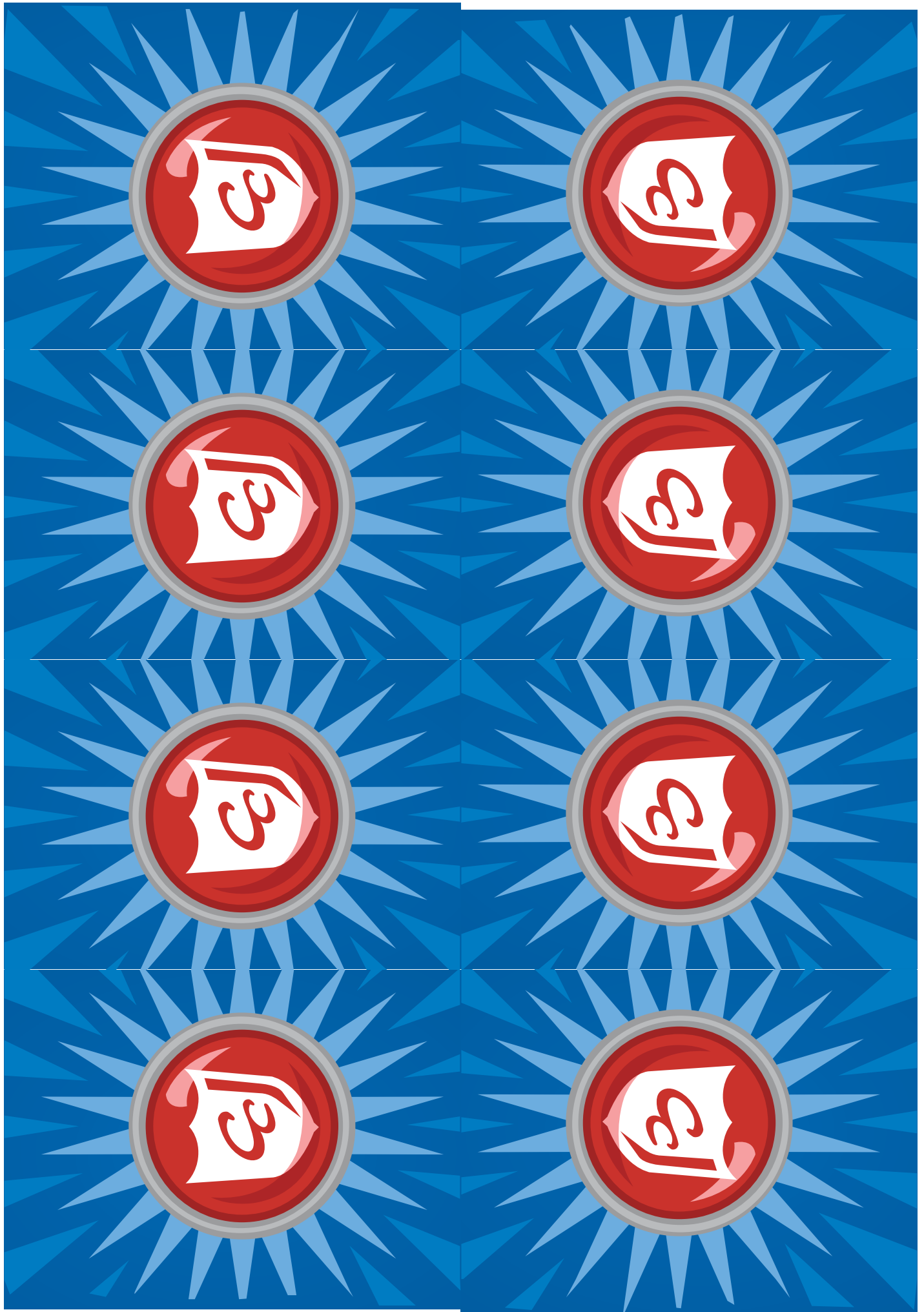
Downloading your
favorite song

2

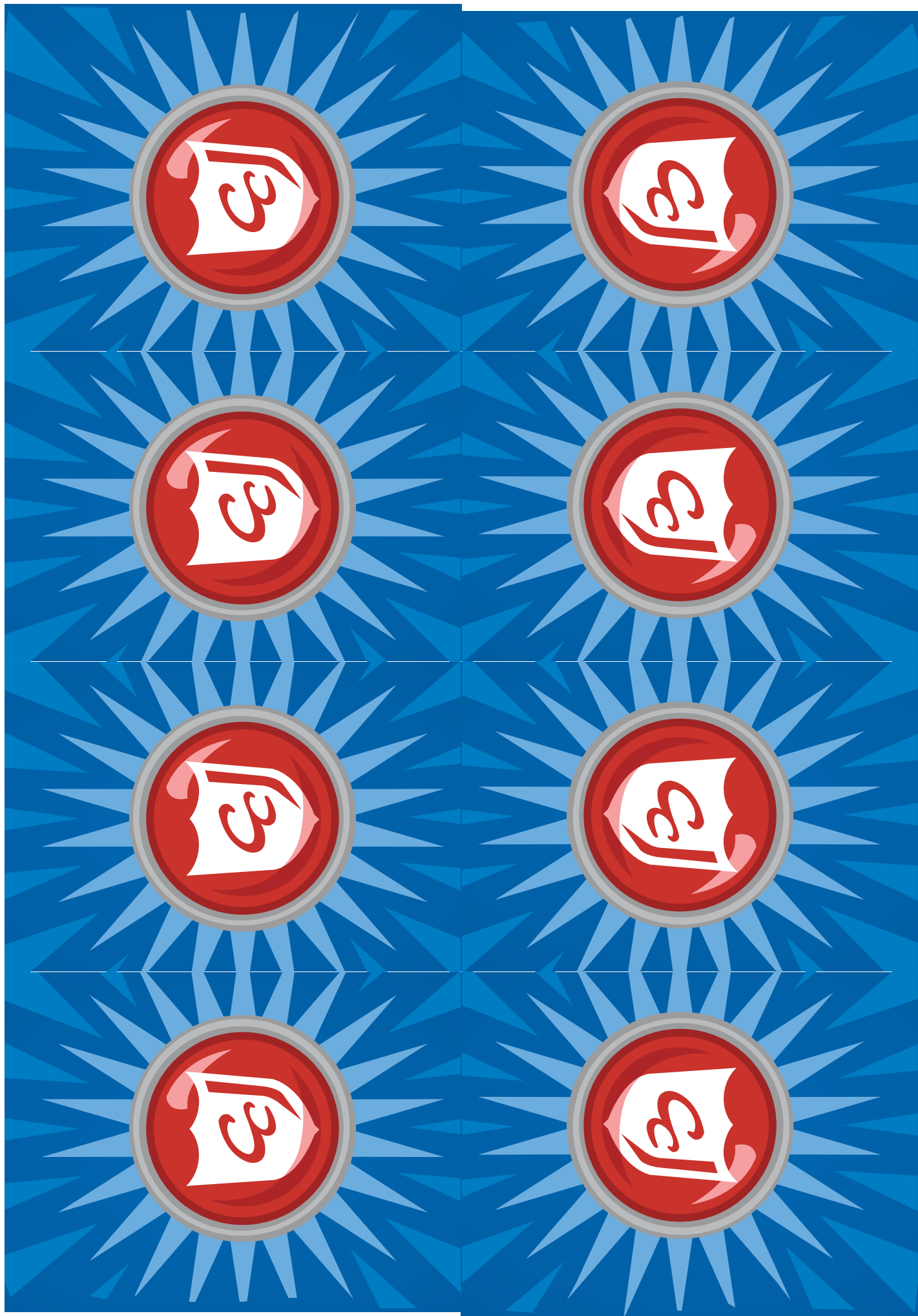
Is the following action
LEGAL or **ILLEGAL**?

Copying another
student's poem
from the Internet
for your homework

1



| | |
|--|---|
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Joining a Social Networking Web site using your Friend's name and personal information</p> <p>12</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>Posting your class project online on a Social Networking Web site</p> <p>13</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Buying items online using your Mom's credit card</p> <p>11</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>Trying to hack into your Teacher's account</p> <p>14</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Altering sentences on your Friend's project and posting it online as your own</p> <p>10</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>Attempting to access other students' grades online</p> <p>15</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Posting an image online of a girl at school with some embarrassing comments</p> <p>9</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>Updating the classroom Web site</p> <p>16</p> |



Is the following action
LEGAL or **ILLEGAL**?

Posting your
personal video
online

21

Is the following action
LEGAL or **ILLEGAL**?

Downloading a clip
of a movie for a
class project

22

Is the following action
LEGAL or **ILLEGAL**?

Sharing your
password with your
friends

23

Is the following action
LEGAL or **ILLEGAL**?

Sharing your
Username or Alias
with your friends

24

Is the following action
LEGAL or **ILLEGAL**?

Posting your class
dance video online

20

Is the following action
LEGAL or **ILLEGAL**?

Posting information
on your school's
Web site without
permission

61

Is the following action
LEGAL or **ILLEGAL**?

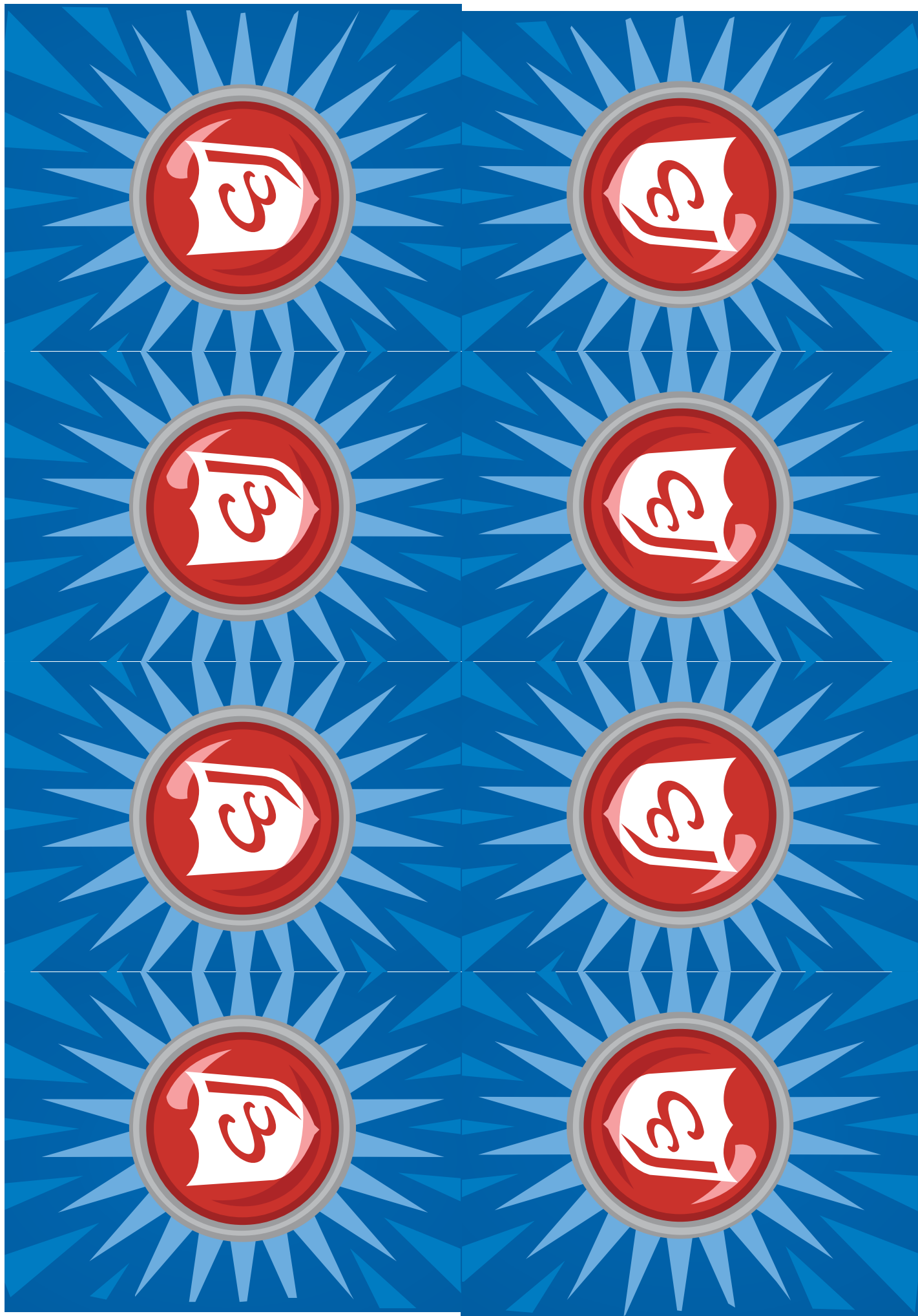
Sending an Email
message to 100
students about a
school event

81

Is the following action
LEGAL or **ILLEGAL**?

Sending an Email
message to 100
students out of
anger

41



| | |
|--|--|
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>28</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>29</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Taking pictures of students with your Cell phone to share with others</p> <p>27</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>30</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Attaching a picture of you at a party to a text message sent to your friends</p> <p>26</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>31</p> |
| <p>Is the following action LEGAL or ILLEGAL?</p> <p>Downloading Free Anti-spyware software</p> <p>25</p> | <p>Is the following action LEGAL or ILLEGAL?</p> <p>32</p> |







CARNEGIE CAPETS: THE MYSECURECYBERSPACE GAME

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Hint Sheet

01

Tips For Identifying Spam Emails

If an email is from someone you don't know and the Subject is like any of the examples below, it is probably Spam:

1 *It sounds too good to be true*

Sender: NotMCSpammer

Subject: You just won millions!!

2 *It is advertising something*

Sender: Joe Schmoe

Subject: Great Deals Here

3 *The email sounds interesting but you weren't expecting it*

Sender: brouhaha

Subject: Win a free game console!

4 *There are lots of misspelled words*

Sender: Sunsh1n3 Superst@r

Subject: Brit3 dats R heer

5 *It sounds really strange*

Sender: Monica Lindsay

Subject: Re: mango justified



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Hint Sheet

02

Examples of Personal Information

Personal Information is information about your OFFLINE identity that someone could use to figure out who or where you are, such as:

- 1 Your Full name
- 2 Your User name or Password
- 3 Your age
- 4 Your ID number or Social Security Number
- 5 Your email address
- 6 Your home address
- 7 Your phone number
- 8 What city you live in
- 9 What neighborhood you live in
- 10 Your parents' names
- 11 Where your parents work
- 12 Names or phone numbers of Family members and Friends

- 13 What school you go to
- 14 Your teachers' names
- 15 Credit Card numbers
- 16 License plate numbers
- 17 Name of team you play for
- 18 Your number on your team
- 19 Places near your house, like stores, restaurants, or parks
- 20 Places you visit regularly
- 21 If you are home alone
- 22 When you are going to be home alone

Tips For recognizing Website Dangers

Some websites contain Dangers that can damage your computer or steal your personal information. When you are exploring websites, watch out for the following 4 Dangers:

1 Links that download Files

These links usually ask if you want to save or open the file when you click on them and can say something like "Click to Download" or "Download Now"

2 Advertisements and Popups

Advertisements have content that is different than the website they are on (like a car Ad on a website about puppies), and sometimes they say "Ad" or "Advertisement" on them

3 Forms that ask for Personal Information

Forms can be a Danger if they ask for personal information like your full name or credit card number

4 Threatening, hurtful, or adults-only content

Content can be a Danger if it makes you feel icky or uncomfortable or says Adults-only or "You must be 18 or older" on it



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Hint Sheet



Tips For Dealing with Cyber Bullying

Cyber bullying is using the Internet to threaten, embarrass, pick on, or put-down people. They can make you pretty miserable, so if you ever run into a cyber bully, remember these tips:

1 When a Bully attacks, first try to ignore or block them.

The Bully is probably trying to pick a fight. If you can laugh it off instead of reacting or fighting back, the Bully doesn't get what they want.

2 If the attacks become overwhelming or scary, you should probably let a trusted adult know about it.

Talk with your trusted adult about strategies to deal with the bullying and come up with a plan together:

3 Be prepared to report the bully.

Save any evidence of the bullying, such as email and instant messages and screenshots of web pages. See Hint Sheet Q5 for information on how to report cyber bullying.

4 Be a good cyber citizen and help prevent cyber bullying.

If you witness cyber bullying, try to do something friendly to help the victim, so they don't feel alone. Don't join in and make things worse.

5 Protect yourself from cyber bullying as much as possible.

Make sure that you won't be an easy target for cyber bullies. Don't share your personal information in Cyberspace, especially photos and videos, and don't try to pick fights with other people.

CARNEGIE CAPETS: THE MYSECURECYBERSPACE GAME

Hint Sheet

05

Tips For Reporting Cyber Bullying For Grown-ups

Cyber bullying is using the Internet to threaten, embarrass, pick on, or put-down people. Remember to save evidence of cyber bullying. Here are some tips for deciding whom to report cyber bullying to:

1 *If the bullying happens through email or instant message...*

Contact the bully's Internet Service Provider (ISP) to see if it qualifies as abuse. They may send a warning or suspend the user's account. Contact your own ISP for help with blocking an account.

2 *If the bullying happens through a website...*

Contact the webmaster, site owner, or customer service and request that the offensive materials be removed. If that doesn't work, contact the website host and ask them to pull down the site if it violates the terms of agreement.

3 *If the bullying happens through a cell phone...*

Contact the phone service provider - most calls can be traced and they may be able to block the calls or let you know where they are coming from so you can report the abuse.

4 *If the bully goes to school with your child...*

Contact the school principal or counselor. If the cyber bullying happens at school or is affecting the school environment they may be able to intervene. If the school does not have a cyber bullying policy, ask them to create one.

5 *If there is the threat of physical danger...*

Contact the local law enforcement if there is the threat of physical harm. They may also have a special cyber crimes unit that can investigate.



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Hint Sheet

06

Netiquette Tips

Netiquette is the etiquette of the Internet, simple rules for how you should act in Cyberspace that keep things polite and help everyone get along. Here's some tips for being a good Cyber Citizen and practicing good Netiquette:

1 Ask Before you Post

Always ask permission before posting about someone or sharing an email, photo, or chat conversation, and make sure that it does not contain any personal information.

2 Pay Attention to Format

Check for typos or other mistakes before you post or send a message. Use emoticons like ;) and acronyms like LOL to get your message across in the right spirit. Avoid using ALL CAPS, it means you are shouting.

3 Be polite and respectful of others

Keep messages short, polite, and to the point. Don't spam people with multiple messages or waste their time. Try not to use too much chat slang if you think the other person won't understand it.

4 Be a Champion, not a Chump

Be helpful and courteous to others and don't be a cyber bully. If someone is being rude to you, be the better person. Talk to a trusted adult, block them, or simply walk away. If they are bullying someone else, don't join in and make it worse. Be supportive and positive and try to help the victim if you can.



CARNEGIE CAPEETS: THE MYSECURECYBERSPACE GAME

Hint Sheet

07

Tips For Growing a Positive Online Reputation

Your online reputation can be positive or negative, it all depends on how you behave when you're in cyberspace and what other people say about you.

- 1 Do share things that would improve your reputation as a good student, a good friend, and a team player.
- 2 Don't share things that would damage your reputation as a good friend and a respectable and trustworthy person.
- 3 Don't share things that will make you a target for weirdo strangers or bullies.
- 4 Be careful about whom you trust with your reputation when you add them to your friends and share things with them.
- 5 Be on the lookout for others damaging your reputation and act quickly to minimize the damage.