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DART: Digital Access and Resilience in Texas logo.


Lesson Plan 7: Introduction to Security

# Lesson Overview:

In this lesson, students will learn how usernames and passwords used in logins provide security for their information and differentiate between strong and weak passwords.

# Lesson Objectives

## Students will:

* give examples of security.
* identify logins, usernames, and passwords.
* differentiate between strong and weak passwords.

# Materials and Setup

## Technology/Equipment

* An Internet- and audio-enabled computer, projector, and screen

## Supplies/Teacher Materials

* Whiteboard and markers

## Student Handouts

* None for this lesson

## Online Resources

* YouTube Playlist 8: [Introduction to Security](https://www.youtube.com/playlist?list=PL7dQUHGMQWMzRT7x2GDBxgHgT_S4dIIvJ)
* Video 1: What is Security?
* Video 2: What is a Login?
* [Skillblox](https://www.skillblox.org/) YouTube Video Playback Tips—Code 5EZ3TL

## Instructional Tips

* ***Key Vocabulary:*** You may want to ask students to label a page in their notebooks for the lesson’s key vocabulary and have them write down each of the words as you explain them as they are used in the context of the lesson. Ask students to write down the meaning of the word in their own language.
* ***YouTube Settings:*** It is highly recommended that teachers watch the [Skillblox](https://www.skillblox.org/) Playlist (5EZ3TL) to learn how to adjust the video speed and to auto-translate videos when this is an option. Teachers may also want to teach their students how to do this.
* ***Keyboarding Practice:*** At the end of class, ask students to text the 2 strong passwords they created for the Evaluation to either your Google voice phone number or to themselves. As time permits, circulate to have them show you the passwords they texted to see if they are written correctly.

# Standards

## Adult English Language Proficiency Content Standard(s)

* 8.1. Recognize the meaning of a few frequently occurring words, simple phrases, and formulaic expressions

## CASAS Content Standard(s)

* L2.9: Comprehend specialized vocabulary (e.g., technical, academic)
* S2.9: Use specialized vocabulary (e.g., technical, academic)
* R2.1: Interpret common symbols
* W4.5: Use specialized vocabulary

## Seattle Digital Equity Initiative Skill(s)

* PS.3: Limit Sharing of Personal Data

## Northstar Digital Literacy Standards for Essential Computer Skill(s)

* Internet Basics 7: Demonstrate understanding of when it’s safe and appropriate to share personal, private, or financial information (e.g., recognizing phishing attempts, identifying unsecured websites)

# Key Vocabulary

* security
* safe
* private
* PIN / personal identification number
* ATM
* login
* username
* password
* strong
* weak

*Reinforced Vocabulary:* uppercase letter, lowercase letter, number, symbol

| Blank cell | NOTES |
| --- | --- |
| **ENGAGEMENT** |  |
| * **Ask:** Do you lock your car when it is in the parking lot? Why? (Wait for responses, such as to keep other people from taking things out of the car.) * **Ask:** Do you lock your house when you are not there? Why? (Wait for responses, such as to keep people from taking things.) * **Ask:** Do you lock your house when you are the only person in the house? Why? (Wait for responses, such as to keep yourself safe.) * **Ask:** How do you lock your car and your house? (Wait for responses – you are looking for ‘with a key.’ Draw a key on the board or show the students a key.) * **Say:** We use a key to keep us safe. How do you say safe in your language? (Ensure that students understand the word safe.) * **Ask:** Can people from the street see you inside your bedroom? Can people from the street see you inside your bathroom? * **Say:** We do not let people from the street see us in the bedroom. We do not let people from the street see us in the bathroom. We want our bedroom and our bathroom to be private. How do you say private in your language? (Ensure that students understand the word private.) * **Say:** Today we are going to learn how to be safe and how to be private when we use computers. We are going to learn how to keep our information safe. How do you say information in your language? (Ensure that students understand the word information.) |  |
| **EXPLORATION** |  |
| * **Ask:** Do you know the word security? (Wait for responses.) * **Say:** Security is to be safe and private. We will watch a video on security. Open the **YouTube Playlist:** [**Introduction to Security**](https://www.youtube.com/playlist?list=PL7dQUHGMQWMzRT7x2GDBxgHgT_S4dIIvJ) and play **Video 1: What is Security?** * **Ask:** Where or when do you need security in everyday life? (Encourage student to provide examples from the video such as at home, for your car, for the ATM machine, and for your phone.) * **Ask:** How do we keep our home and our car safe? (Wait for responses – you are looking for ‘with a key.’) * **Ask:** How do we keep our money at the ATM safe? (Students may not know the word PIN. Write PIN on the board and then write beside it ‘Personal Identification Number.’) * **Say:** A PIN is a personal identification number that we use to keep our money safe. (Write an example PIN with 6 numbers in it next to the word PIN on the board.) * **Ask:** Do you have a PIN for your phone? (Wait for responses.) * **Ask:** How do you keep your phone safe? Get out your phone and unlock it. (Watch students to see if they use a PIN, a fingerprint, or facial ID. Write thumbprint and facial ID on the board.) * **Ask:** Who uses a PIN? (Demonstrate on your phone and wait for responses.) * **Ask:** Who uses a thumbprint? (If possible, have a student demonstrate using their thumbprint to open their phone or pretend to do this on your phone even if you do not have that capability.) * **Ask:** Who uses facial ID? (If possible, have a student demonstrate using their facial ID to open their phone or pretend do this on your phone even if you do not have that capability.) * **Say:** A PIN is like a key for your phone. Do you use a PIN for the ATM machine at the bank? (Wait for responses.) * **Say:** A PIN is a number that works like a key to get into the phone. |  |
| **EXPLANATION** |  |
| * **Say:** Most people need a login to use the computer. We are going to see a video about logins. * Open the **YouTube Playlist:** [**Introduction to Security**](https://www.youtube.com/playlist?list=PL7dQUHGMQWMzRT7x2GDBxgHgT_S4dIIvJ) and play **Video 2: What is a Login?** Play the video at least 2 times if you have beginning ESL students. The second time, stop the video as necessary to check for student comprehension. * **Ask:** Where do you use a login? (Encourage students to provide examples of logins, even if it is using a PIN to get into their phone or the ATM. If no student has a login for something online, give an example of where you login on the computer.) * **Ask:** Why do you use a login? (Wait for responses.) * **Say:** We use a login to protect our information. Protect is to keep safe. Logins keep our information safe. * Draw an example of a login on the board. It should look something like the image below:   Login  Username \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Password \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * **Say:** On a computer, a login has 2 parts. The first part is a username. What is a username? (Encourage students to provide examples of usernames. If no student has a username that they use, give an example of your email username.) * **Say:** The second part is the password. What is a password? (Wait for responses.) * **Ask:** Does anyone have a login with a username and a password? (Wait for responses – ask students what the login is for.) |  |
| **ELABORATION** |  |
| * **Say**: Now you will work with a partner. Write down 3 things you keep safe. Then write down things on your phone that you use, like Facebook, a bank, or Amazon. Do you know your username and password for these places? * Ask students to volunteer their responses as you scribe them on the board or ask advanced students to write their responses on the board. |  |
| **EVALUATION** |  |
| * Write the following sentence and word box on the board: We use \_\_\_\_\_\_\_\_\_\_\_ to keep our personal \_\_\_\_\_\_\_\_\_\_\_\_\_\_ safe. Most \_\_\_\_\_\_\_\_\_\_\_\_\_ have 2 parts: a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Passwords are \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Never share your \_\_\_\_\_\_\_\_\_\_\_\_\_\_.   username  logins (use 2x)  password (use 2x)  information  private   * **Say**: Please get a piece of paper. Copy the sentence on the board. Use the words in the box in the sentence. Demonstrate by filling in the first blank (logins). * Check the answers with students by having volunteers write the words in the blanks on the board. |  |
| **Differentiation Resources to Meet Diverse Learner Needs** |  |
| * If you have lower-level students or students from countries with less technology-related security, students may only be able to give examples of security for items that are not digital. * It works well to combine this lesson with Lesson 8: Strong and Weak Passwords |  |