

The background is a dark blue and black circuit board pattern with glowing white lines and dots. A glowing green padlock is positioned in the center-left. Several large, irregular teal shapes are scattered around the padlock and the text.

AUTHENTICATION

Password Safety

Passwords – Good or Bad?



Ex 1. Password!

Ex. 2 !@9YAt#f3h

Ex. 3 woRA70

Ex. 4 SquidGames2021

Ex. 5 $Rone * HK^0_5$

Why are
Passwords
so Important?





Warm Up: Why are passwords so important?

1. Silently think about the question above.
2. Turn to your neighbor and discuss what your ideas.

The image features six teal, hand-drawn brushstroke shapes arranged in two vertical columns of three on either side of the central text. The shapes are irregular and elongated, resembling thick paint strokes.

Discuss as a Class

Learning Objectives

1

Learn about three different password attacks.

2

Learn how to create strong passwords that can defeat these attacks.

3

Practice creating strong passwords that are memorable.



What is a password?

A secret word or phrase that is used to restrict access to something, usually an online account.

The image features a dark blue background with a subtle gradient. On the left and right sides, there are several teal-colored brushstroke-like shapes, some horizontal and some diagonal, arranged in a way that frames the central text. The text is centered and reads "The Three Deadly Password Attacks!" in a white, serif font.

The Three Deadly Password Attacks!



Passwords are Compromised by:

- Brute Force Attacks
- Dictionary Attacks
- Password Reuse Attacks



Let's break it down:
Brute Force Attack

What does brute mean?

An absence of reasoning or
intelligence.





What is Force?

To make a way through or into
by physical strength

Putting it back together: Brute Force Attack

An attack that relies on the strength of modern computing to try all possible combinations to find the correct password.



The slide features several decorative teal-colored shapes on a dark blue background. These include a circle at the top center, a horizontal pill shape below it, a vertical pill shape on the left, another vertical pill shape slightly to its right, and a diagonal pill shape further to the right.

Defeating
brute force
attacks!

Strong Password Characteristics:

- Letters (Upper and Lower)
- Numbers (0 through 9)
- Symbols (!, \$, # , %, ?)
- At least 8 characters long



Let's break it down:
Dictionary Attack

What is a Dictionary?

A book that list of words and
their intended meaning.





Putting it back together: Dictionary Attack

An attack that uses dictionary words and a list of commonly used passwords to guess the correct password.

Defeating Dictionary Attacks!

Avoid:

- Commonly used passwords
- Full words or sentences

Be safe by:

- Breaking up words with numbers or symbols
- Remove vowels
- Replacing letters with symbols or numbers



Let's break it
down:
Password Reuse
Attack



Reuse

To use something again or
more than once.



Putting it back together: Password Reuse

An attack that relies on a reused passwords to gain access to your account.



Defeating password reuse attacks!



Never reuse your passwords.

Avoid creating passwords that are similar to your other account's passwords.

Password complexity

A Bad password:

- Contains personal information (pet names or birthdays)
- Has repeating letters, numbers or symbols
- Is similar or the same as a password from another account
- Has unbroken full words or sentences

A Good password:

- Has a good variety of letters, numbers and symbols
- Breaks up words with letters or symbols
- Is always 8 characters or longer
- Is Unique

The slide features six teal, hand-painted brushstroke shapes arranged in two vertical columns of three on either side of the central text. The background is a dark blue gradient.

Password etiquette

Never share your password with
anyone!



Memorize your password!

Create a story for your password

Relate passwords to the website or service

Transform a phrase or quote

Passwords – Good or Bad?



Ex 1. Password!



Ex. 2 !@9YAt#f3h



Ex. 3 woRA70



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Ex. 5 Rone*HK%5





Group Activity – Create a Password

& Worksheet

Wrapping Up

We learned about three different password attacks.

We learned how to create strong passwords that can defeat these attacks.

We practiced creating strong passwords that are memorable.

The image features a dark blue background with a subtle gradient. On the left and right sides, there are several teal-colored brushstroke-like shapes. On the left, there are three shapes: one at the top, one in the middle, and one at the bottom. On the right, there are also three shapes: one at the top, one in the middle, and one at the bottom. These shapes are irregular and have a hand-painted appearance.

Think about what
you learned