



Password Strategies Handout

Introduction

Before you start the activity, ask your partner these questions:

- Do you use the same password for more than one thing?
- Does your password mention a number that would be easy to guess like your birthday?
- Does your password use your name?

Directions

Practice using these methods to build new, more secure passwords.

1. Sentence Method

Security expert Bruce Schneier put forth a password method in 2008 that he still recommends today. It works like this: Take a sentence and turn it into a password.

The sentence can be anything personal and memorable for you. Take the words from the sentence, then abbreviate and combine them in unique ways to form a password. Here are four sample sentences:

- WOO!TPwontSB = Woohoo! The Packers won the Super Bowl!
- PPupmoarT@O@tgs = Please pick up more Toasty O's at the grocery store.
- 1tubuupshhh...imj = I tuck button-up shirts into my jeans.
- W?ow?imp::ohth3r = Where oh where is my pear? Oh, there.

Practice building your own sentence password:



2. 12 Random Words Method

Did you know passwords can be phrases now? You can start with a phrase such as "Even in winter, the dogs party with brooms and neighbor Kit Kats." Just make sure it is not a simple phrase or a phrase taken from existing literature. You can grab 12 random words from the dictionary, too: "Pantry duck cotton ballcap tissue airplane snore oar Christmas puddle log charisma."

When placed into a password checker, the 12-word pass-phrase above shows that it will take 238,378,158,171,207 quadragintillion years for a brute force attack to crack.

Try creating your own 12-word phrase password:

3. The PAO Method

Memorization techniques and mnemonic devices might help you remember longer passwords. At least, that's the theory put forth by Carnegie Mellon University computer scientists, who suggest using the Person-Action-Object (PAO) method to create and store your unbreakable passwords.

PAO gained popularity in Joshua Foer's bestselling book, *Moonwalking with Einstein*. The method goes like this: Select an image of an interesting place (Mount Rushmore). Select a photo of a familiar or famous person (Beyoncé). Imagine some random action along with a random object (Beyoncé driving a giant Jell-O mould at Mount Rushmore).

Once you create and memorize several PAO stories, you can use the stories to generate passwords. For example, you can take the first three letters from each word to create "BeyDriGiaJelMouMouRus."

Now you have an 21-character password that'll appear completely random to others, yet familiar to you.

Create your own PAO method password:

