

### **Privacy and Security**

I can explain what passwords are and can use passwords for my accounts and devices.

#### **Outcome Criteria**

- Identify the features of effective passwords.
- Identify why we need passwords for accounts/devices.

#### **Questions To Ask**

- What is a password?
- Where do we use passwords? (games, devices, etc.)
- Do you have any passwords? What are they for?
- Who knows your passwords? Why?
- Why do we need passwords?
- Do you know what makes a strong password?
- Do you know what makes a poor password?

### **Activity Descriptor**

#### Passwords are key(s)!

Using **the slides**, ask learners the following questions to gauge current understanding about passwords:

- What is a password?
- Where do we use passwords? (games, devices, etc.)
- Do you have any passwords? What are they for?
- Who knows your passwords? Why?

Ask learners if they can think as to why we use passwords on devices and accounts (e.g. stops others from using our device or account, stops someone from seeing/taking our things/information, stops someone from pretending to be us, etc.)

Explain that passwords are very important to help keep our information and devices safe so we need to make them as strong as possible. A good way to think of passwords is that

they are like keys for doors. (You may wish to show the learners some examples of different door keys). Explain that keys have very complicated teeth to fit into a lock, and only a key with the exact layout of teeth will successfully fit and turn the lock tumblers.

Explain that you are going to play a game where learners have to guess your password. Using the slides, show the 'simple' key with a 3 character password (cat). Ask learners to guess the password and take suggestions until they guess the correct answer. (You may wish to ask another learner or adult to keep count of the number of guesses, or the time taken to guess the password).

Now display the 'harder' key with a 5 character password (stamp). Ask learners to guess the password and take suggestions. As this word is longer (and harder), you may wish to take a few guesses then switch to a 'hangman' format where learners must guess letters that the password contains. Again, you may wish to time this activity or ask a volunteer to count the number of guesses needed to guess the password.

Ask learners which password was easier to guess? Why? (e.g. the 3 character password was shorter and easier to guess words for).

Now show learners the final hardest key with a 9 character password (topcatsun). Repeat the hangman process until the password is guessed. (If it takes too long, you may wish to cap the game at a certain number of guesses and then reveal the password).

Reveal the password to learners; do they notice anything? (It is made up of three small words). Was this password easier to guess than they others? Why not? (It was a lot longer).

Ask learners if they think this is a password they could remember? Why?

Explain that the most important thing that makes a good password is its length, even if it is made up of small words.

Show learners the final slide which gives some examples of what does and does not make a good password.

#### Task:

Using the worksheet, ask learners to think of an example of a poor password and write it onto the teeth of the 'poor' password key, and an example of a strong password and draw the teeth for the 'strong' password key and record the characters onto the teeth. Encourage learners to be creative with the shape of the teeth!

Ask learners to share their poor and strong passwords and to explain what made these poor/strong.

You may also wish to use these passwords to create a visual display to help remind learners of what makes a poor/strong password. (Remind learners not to use any of their actual passwords when completing the keys!)



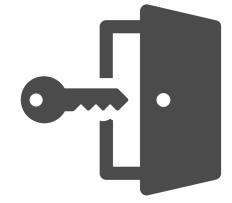






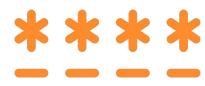
## Passwords are key(s)!

I can explain what passwords are and can use passwords for my accounts and devices.





# What is a password?





# Where do we use passwords?









# Who knows your passwords?





## Passwords are like keys!

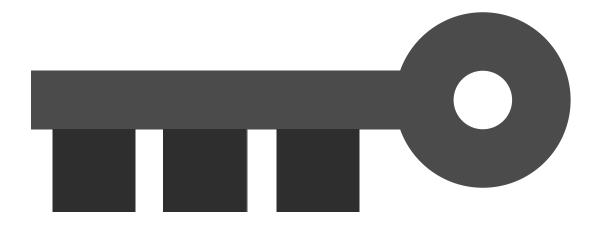








## Guess my password!





### Guess my password!





### Guess my password!





## Poor passwords

123456



abcdefgh

myname

password

qwertyuiop

changeme

liverpool

DanTDM

dragon



## Strong passphrases



cupsheeporange

topcatsunfan

mousepastaphone

wowthisiscrazy







### Strong and poor passwords

