

Examples:

b l u e s h o e

r a i n f o r e s t

Vocabulary word:

Bonus words:

✂ _____

1	2	3	4	5
6	7	8	9	0
!	@	#	\$	%
*	&	^	?	-

Cyber Security Education Initiative :)



In the spirit of National Cyber Security Awareness Month, the nonprofit Center for Internet Security, Inc. (CIS) is seeking to **raise awareness among our nation's children about safe online behaviors** through the delivery of comprehensive, engaging, and effective cyber security activities.

CIS is building a **collaborative** environment with cyber security experts, educators, and advisors to provide relevant and timely activities that are **designed by educators for educators**.

We want to provide **fun, interactive learning experiences** that incorporate **cyber security** into foundational subject areas such as **math, science, and English language arts**.

This program will include **"download and go"** teacher tested/teacher-developed activities and handouts. Related reading for teachers and technology coordinators, and parents will also be included.

Included is a sample of the activity books we will develop. This booklet focuses on building strong passwords and can be used to reinforce vocabulary words! ☺

ACTIVITY

Strong Passwords

Grades 3-5

In this activity, students will build on their existing knowledge of passwords and password security. Students will learn to use easy-to-remember, but hard-to-guess words, mixing upper case and lower case letters, substituting numbers and symbols for letters to make passwords more complex.

This lesson can be used as a take-home assignment, a bonus on a spelling test, or as a group activity.

Objective

Students will be able to provide at least one example of a strong password that includes numbers, symbols, and upper and lower case letters.

Set up

Each student will need a small piece of scrap paper, activity page, a marker, scissors, and an index card with a vocabulary word written on it.

Pre-Assessment

On the scrap paper, students will write down a word that they think would make a good password. (NOT using any of their current passwords). Students do not need to include their name; this assessment can be collected as soon as students finish.

Body

The teacher will instruct students to look at the word “blue” on the first line of their activity page under the “examples” section.

The teacher will ask “do you think this is a good password?,” followed up with “why?/why not?”

The teacher is looking for students to say that the password is short, and/or it is easy to guess.

The teacher will ask “what can we do to make “blue” stronger?”

The teacher is looking for students to say add to it/make it longer/harder to guess.

The teacher will ask students to cut their activity sheet on the dotted line, and then cut out each square to make cards. Using their number/symbol cards, is there a way that students can spell “blue” by replacing a few letters with numbers? They will write down their answer on the next line of the activity page. (b1u3)

Body - Continued

The teacher will have the students look at the next word, “shoe,” on their next line – this time the teacher will ask students to use a combination of numbers and symbols. Next, the teacher will ask students to try to change to a word with upper and lower case letters but keeping the numbers and symbols. (\$h03, S#oE, \$hOe)

The teacher will have the students look at the word “rainforest” on their activity page, the teacher will ask the students to try to make the word stronger using their letter/number/symbol cards.

Example:

r	a	i	n	f	o	r	e	s	t
R	@	1	n	F	0	r	e	\$	t

The teacher will give each student one index card. The students will write this word down on the activity page under the “vocabulary word” section. The students will then turn this word into a stronger password.

Then the teacher will tell the students to think of a word that is easy to remember but would be hard for someone else to guess. The teacher will have the students write down one of those words under the “bonus word” section. The teacher will instruct the students to use the number/symbol cards to alter their “password” to make it more complex. (There are enough lines for them to do this twice!)

Conclusion & Post-Assessment

The teacher will ask students to use the activity page to “grade” their passwords – how safe are your passwords? What could you do to make them stronger? (Teacher can use the discussion as an informal assessment and/or collect the activity sheets for assessment.)



Learn more about this initiative: contact@cisecurity.org

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