

Cybersecurity CyberSnack: Pig Pen Cipher

Time: 10-15 min

What You'll Need: **Pig Pen Cipher**



NICE FOCUS: Cybersecurity Career Awareness

Learning Objectives: I can understand the importance of cryptography by completing the Pig Pen Cipher activity.

Essential Question: What is cryptography and how is a cipher related to it?

Key Words: cipher, cryptology, cryptography, cryptanalysis, key, encoding, decoding

Activity Steps

Teacher Action	Student Action
<p>1. <u>I do, we do, you do</u></p> <ol style="list-style-type: none"> Model how pigpen cipher works with your own message Practice as a class or group how a pigpen cipher works with your own message Distribute handout or display pigpen cipher to be completed individually <ol style="list-style-type: none"> Answer: “cyber security is a great career” <p>2. <u>Reflection Question:</u> <i>What do you think is the connection between the activity you just completed and a cybersecurity career?</i></p> <ol style="list-style-type: none"> Have students share responses in teacher chosen method <p>Possible ANSWER: from [Encryption for Kids! (purdue.edu)] A code is a system of symbols, letters, words, or signals that are used instead of ordinary words and numbers to send messages or store information. A code is used to keep the message short or to keep it secret. Codes and ciphers are forms of secret communication. A code replaces words, phrases, or sentences with groups of letters or numbers, while a cipher rearranges letters or uses substitutes to disguise the message. This process is called encryption or enciphering. The science that studies such secret communication is called cryptology. Secret writing has been used for a long time. People have used codes to send secret messages and that are meant to keep private. Cryptology has and continues to be used by governments, the military, businesses, and organizations to protect their information. Today, encryption is used to protect storage of data and transactions between computers.</p>	<p>1. I do, we do, you do</p> <ol style="list-style-type: none"> Students are engaged Students work as a class or in groups to decipher message Students complete activity on their own <p>2. Students share responses through teacher's preferred method.</p>









Pig Pen Cipher



The Pigpen Cipher was used by Freemasons in the 18th Century to keep their records private.

Symbols represent the letters.

A	B	C	J	K	L	S	U	W			
D	E	F	M	N	O				T	X	Y
G	H	I	P	Q	R				V	Z	

For example: A =  K =  V =  Y = 

Can you decode the following?































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