Create Your Own Secret Code

People have always enjoyed writing in codes or ciphers. Maybe it’s because they can share secrets with a friend that would be very difficult for others to decipher (Hey! That word comes from “cipher!”) without the key. While codes and ciphers both encrypt (hide) the meanings in a message, there is a slight different between them: A code uses symbols, pictures or groups of letters to stand in for letters or words. A cipher simply substitutes one symbol for one letter.

Did you know that people have been using codes and ciphers for over 2000 years? According to https://www.topspysecrets.com, the Roman general and statesman Julius Caesar created the first cipher. Caesar’s idea was pretty simple. All he did was replace one letter of the alphabet with a different one. That way he could share important information with friends that enemies would not be able to understand. As time went on, creators needed to develop ciphers that were harder to crack.

During the Renaissance, the artist and cryptographer (someone who designs codes and ciphers) Leon Battista Alberti invented a cipher wheel (shown above left). It consisted of two circles engraved with letters of the alphabet. When a person aligned the wheels in a certain way, they could create a new code.

Over time, code designers have become more and more sophisticated. Technology has allowed people to create very complicated codes. Spies have long relied on codes to keep their messages secret. If the enemy comes across an encrypted message, they won’t have any idea what it means. So codes and ciphers can be life-savers in dangerous situations.

If you’ve ever watched a baseball catcher flash fingers between their legs so the pitcher knows what to throw, you’ve seen a different kind of code in action. If the opposing team figured out what the code meant, they would know what kind of pitch to expect; that might affect the outcome of the game.

Today we will create a code just for fun and we will mix art with code design to come up with a visually interesting cipher. You can create your own code or cipher to communicate with a friend or family member. See if you can stump someone!
Supplies:

Paper (graph paper may be helpful), pencil, pen, markers (if you want to color in your symbols), images downloaded from the internet (optional)

Procedure:

There are many different ways to create your own code or cipher. In the first method, you simply design your own fake alphabet. You’ll need 26 different symbols—one for each letter in the English alphabet. Try inventing your own “letters” by using simple shape and line combinations. It can be helpful to write out the alphabet first and then create your own symbol below each letter. You can write first in pencil and then go over your symbols with a pen. Here is “Academy Art Museum” written with the above cipher:

Have you ever seen the sentence “The quick brown fox jumps over the lazy dog?” Do you know what’s so special about it? It uses every letter of the alphabet. Here is that sentence using the above cipher:
Here is a cipher that uses shapes and colors for the letters:

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

Here is “Academy Art Museum” in this new code:

You could also use pictures of food or animals or celebrities in your code: the possibilities are endless!

If you’re stuck at home and not able to see your friends, think about inventing your own code or cipher and see if you can communicate with each other!