Frisco Library Activities at Home

Give a friend a special Valentine's Day card that has a secret message for them to decode!

Supplies needed:

Colorful paper or cardstock Art supplies such as markers, glitter, and stickers A joke or riddle to solve

Directions:

Think of a funny Valentine's Day riddle or joke. Here is some inspiration to help get you started:

- Q. What did the hamburger buy his sweetheart?
- A. An onion ring!
- Q. What did one volcano say to the other?
- A. I lava you!
- Q. What do you call two birds in love?
- A. Tweethearts!

Take your colorful paper or cardstock and fold it in half to make a greeting card. Write the question from your riddle on the front of the card.

Now, it is time to encode the answer to your riddle. To do this, use an Atbash cipher. In an Atbash cipher, A becomes Z, B becomes Y, C becomes X, and on and on. This is the Atbash cipher key:

A = Z	N = M
B = Y	O = L
C = X	P = K
D = W	Q = J
E = V	R = I
F = U	S = H
G = T	T = G
H = S	U = F
I = R	V = E
J = Q	W = D
K = P	X = C
L = 0	Y = B
M = N	Z = A

Here are two examples of how the cipher works. Using the Atbash cipher key, the message:

SVOOL

can be solved like this:

S = H

V = E

O = L

O = L

L = 0

So, the secret message is HELLO.

If you want to encode the word BYE using the cipher, you will use the cipher to find:

Y = B

B = Y

V = E

So, to encode the word BYE, you would write:

YBV

Open up your Valentine's Day card and copy the Atbash cipher key onto the left side of the card. This will give your friend the key they need to solve your secret message.

On the right side of the card, write the answer to your riddle as a secret message using the Atbash cipher as your guide.

Be sure to sign the card with your name. Use your art supplies and stickers to decorate the card, and then give it to your friend to solve.



