

Cryptography: Cracking the Code

Simple Caesar Ciphers

Key = 1

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
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	A

Key = 2

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

Key = __

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

fold here before sharing your code

Activity 1: Monoalphabetic Key

Using a simple Caesar Cipher, create a code for either of the below sentences:

Mangoes are delicious.

Eat bananas upside down.

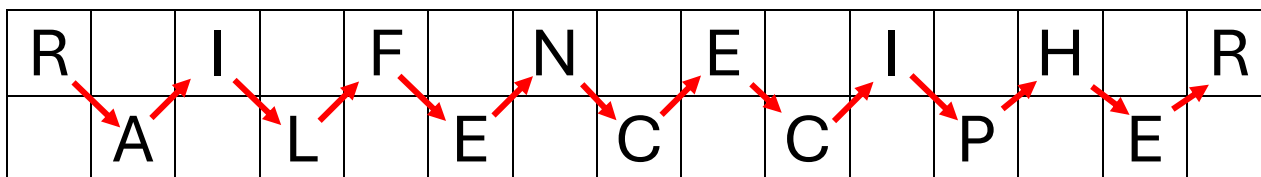
CODE: _____

Fold your sheet in half and ask your friend to test your encrypted code to see if it works 😊

Tip: Remove punctuations and spaces between the words to make it tricky!

Activity 3: Rail Fence Cipher (a.k.a. Zig-Zag Cipher)

Example: Encrypting “Rail Fence Cipher” makes RIFNEIHRALECCPE



How to encrypt a secret word using this cipher:

1. Count the number of letters in the word or phrase. This will be the number of columns in your cipher grid.
2. Decide on a key. This will be the number of “rails”, or rows, in your cipher grid.
3. Draw your grid and write each letter in a zig-zag pattern, going all the way to the bottom of the grid before going back to the top.

Encrypt “French Fries” with a key of 2.

F										

Encrypted word: _____

Let’s encrypt the word “RHINOCEROS” with a key of 3.

1. Number of rows (key): **3**
2. Number of columns (number of letters): _____. Divide the grid below into this many columns.

R										

Encrypted word: _____

