Worksheet 1: The Caesar Cipher

Julius Caesar used a simple substitution cipher to send messages to his troops. He substituted each letter by the letter that was 3 places further along in the alphabet, so that "a" was replaced with "D", "b" with "E" and so on.

Part I. complete the table below to show what each letter is enciphered as using this system.

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
D	E	F																							

Part II. Using the Caesar Cipher, encode the name of your school. Did your partner get the same answer?

_____

Part III. Computer scientists would call 3 the "key" for this cipher. How many different keys are possible?

_____

Part IV. Decode this message, which was encoded using the Caesar cipher from the table above:

Z	K	D	W		G	R		B	R	X		J	H	W		Z	K	H	Q		B	R	X

F	U	R	V	V		D		V	Q	R	Z	P	D	Q		Z	L	W	K		D

Y	D	P	S	L	U	H	?		I	U	R	V	W	E	L	W	H

Worksheet 2: The Packet Villain

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

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

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

Encode your name using one of the ciphers above. Ask your partner to figure out what key you used.

My name: _____   Which key/table was used? Key 5? 10? 18?

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Surprise Party

You and your teammates are planning a surprise party. To ensure no one else figures out the details, you are going to encode them. Each of you will fill out **ONE** of the details below (decide in advance who is doing which part). Encode the answer using one of the ciphers above (you do not all need to use the same cipher).

When you are all done encoding, give all your papers to another team to see if they can figure out your party.

WHO (whose surprise party is it?)

WHERE (where are you holding the party?)

FUN (what game or activity will you do for fun?)

BRING (what gift will you bring?)