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

***Part II.*** Using the Caesar Cipher, encode the name of your college. Do you think other students/participants will get the same answer?



***Part III.*** Cybersecurity folks would call 3 the “key” for this above cited Caesar cipher in Part I. How many different keys are possible?



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

