

Cipher Practice

Name: _____ Period: _____

Shift Cipher

1. Encrypt the following message using a shift-1 cipher:
thedishranawaywiththespoon
2. Encrypt the following message using a shift-11 cipher:
littlemissmuffetsatonhertuffet
3. The following message was encrypted using a shift-3 cipher. Decrypt it.
SHWHUSHWHUSXPSNLQHDWHUKDGDZLIH
4. The following message was encrypted using a shift-4 cipher. Decrypt it.
SPHOMRKGSPIAEWEQIVVCSPHWSYP

Random Substitution Cipher:

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

5. Encrypt the following message using the cipher alphabet above:
thedishranawaywiththespoon
6. Encrypt the following message using the cipher alphabet above:
littlemissmuffetsatonhertuffet
7. Decrypt the following message using the cipher alphabet above:
ITKTVTIQCTORQIG
8. Decrypt the following message using the cipher alphabet above:
VOFFOFUITKVQNZGYQDT

Viginere Cipher

9. Encrypt the following message using the Viginere cipher key WHEAT:
takemeouttotheballgame

10. Encrypt the following message using the Viginere cipher key DONUT:
ohbeautifulforspaciousskies

11. Decrypt the following message using the Viginere cipher key SANTA:
GVRKTZEEBVWRNGDLHEHUYHGAEOOBWS

12. Decrypt the following message using the Viginere cipher key HOLIDAY:
JWEGVIBLKL TNSZBGJALDCDOWSV

Transposition Cipher (Block Interleavers)

13. Encrypt the following message using a 4 X 4 block:
littlejackhorner

14. Encrypt the following message using a 3 X 4 block.
satonacorner

15. Decrypt the following message using a 3 X 5 block:
TTHHAEENHCDAATT

16. Decrypt the following message using a 3 X 6 block:
TEAHNNEEDGGHRGAESM

One-Time Pad:

17. Encrypt the following message using the following plaintext and key:

plaintext: **a h o r s e i s a h o r s e**

key: **P L M O E Z Q K J Z L R T E**

ciphertext:

18. Decrypt the following message using the following ciphertext and key:

ciphertext: **U C X Y U M D Y T O D U M H N Z C Q R B**

key: **H O J L Q K D L A O S K T T N S O Z Z X**

plaintext: