

1. Suppose you know the following message was enciphered with Hill (2 dimensions with mod 29):

P! IT WO BI XM PR

Break it knowing the first word of the message is “join”.

2. Encipher the message “Have a happy homecoming” using Playfair system with key work “eternal.”
3. Decipher the message:

GT HZ FD UC NW QS CI DT DP QG WE

using the Playfair system with key work “witness.”

4. Encipher the following Charles Dickens quote  
“The most important thing in life is to stop saying ‘I wish’ and start saying ‘I will.’  
Consider nothing impossible, then treat possibilities as probabilities.”  
using rectangular transposition with key word *potter*.

5. Decipher the following message

AEAET ERHHN HTDFP PEANE OEEIN TIRTU SNFSR WTEIE DOHRI HHHEA VCRRS  
ERTAM OOTRR ILEOG VAANA YLRSG IMATN AHOEO RODOT GEHMN AERAE NIY

knowing it was encipher with rectangular transposition with key word *coupons*. Make sure restore spacing between words, capitalization and add punctuation to make it readable.

6. Look on the website for homecoming events at USD. Choose an event that you would be most likely to attend and write that down. I won't make you actually go to the event but consider doing it, it builds school spirit.