## Peter Lucas

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

QM VO QF MG CU OU

Break it knowing the first word of the message is "move".

- 2. Encipher the message "Keep working on your project" using Playfair system with key work "legally."
- 3. Decipher the message:

VL QD RI GY AF TG IA KR GT KO YF FA TU KO LS

using the Playfair system with key work "algebra."

4. Encipher the following Charles Dickens quote"Take nothing on its looks; take everything on evidence. There's no better rule."

using rectangular transposition with key word *number*.

5. Decipher the following message

OHEUE ADTOU TWOLG AOORR OYHEY IIERE NRUOE FTEHR UATTU MNLEE REARN TRHRW BOVLE PEWRO DFNEE OOSLI NCMOO HOYAS MHNTY DOATR METMT EFNFL BNAOB L

knowing it was encipher with rectangular transposition with key word *eternal*. 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.