Cyber Security
Enigma Machine Name _____

Working alone or with a partner, we will be examining the German Enigma machine used in World War II to encrypt the German messages. The Enigma was a complicated machine that needed to be set correctly in order to correctly decrypt a message.

To correctly encrypt/decrypt a message, the rotor positions, reflector, and starting positions must be known and set.

1) Using the Rotors I, III, V in starting position Q, V, Z and using Reflector B, encrypt the following message: **ATTACK AT DAWN**

2) Again using the Rotors I, III, V with starting position Q, V, Z and Reflector B, decrypt the following message: **SX OTP GYJHKNQZ**

3) Using Rotors II, IV, I with starting position A, A, A and Reflector C, encrypt the following message: **ENIGMA**

4) Encrypt a message and give it to another group to decrypt. You'll need to provide the following information to the other group.

   Plaintext Message (don't share): _____

   Encrypted Message: _____

   Rotors: _____ _____ _____

   Starting Position: _____ _____ _____

   Reflector: _____

5) Get the following information from another group and decrypt

   Encrypted Message: _____

   Rotors: _____ _____ _____

   Starting Position: _____ _____ _____

   Reflector: _____