Cipher Instructions

Enigma Slide Rule Cipher

Encoding

1. Write down the message you want to encode
2. Determine the key you want to use
3. Write the key out above the text to be encoded
4. Align the arrow on the cipher with the first letter of the key
5. Find the non-coded form of what you want to encode. If a letter choose which coded row you are going to use. If a character or number use the last coded row.
6. Repeat steps 4 & 5 until the entire message is coded. Use the next letter in the key each time. When you reach the end of the key repeat it.
7. Write a hint to help people figure out your key. If you used the second coded letter row, make sure you include something in your hint that tells that.

Decoding

1. Figure out the key for the message
2. Write the key out above the coded message
3. Align the arrow on the cipher with the first letter of the key
4. Find the coded letter, character, or number then look at the non-coded row to see what the coded form pairs with. Write the non-coded form under the coded message. If it is a letter that is coded make sure that you are using the correct coded row.
5. Repeat steps 3 & 4 until the entire message is decoded. Use the next letter in the key each time. When you reach the end of the key repeat it.

Mexican Army Cipher

Encoding

1. Write down the message you want to encode
2. Determine the key you want to use and record it
3. Write the key above the plain text
4. Align the wheels and record the encoded message
5. Repeat step 4 until the entire message is encoded

Decoding

1. Write down the message you want to decode
2. Figure out the key for the message
3. Write the key out above the coded message
4. Align the wheels and record the decoded message
5. Repeat step 4 until the entire message is decoded

Confederate Army Cipher

Encoding

1. Write down the message you want to encode
2. Determine the key and record above the plain text

3. Use the letter A on the inner wheel as the pointer
4. Align the pointer with the first letter of the key
5. Find the plain text on inner wheel and record the corresponding letter
6. Repeat step 5 & 6 until the entire message is coded. Make sure you are aligning the next letter in the key word as you go through the message.

Decoding

1. Write down the message you want to decode
2. Determine the key for the message and write it above the coded text
3. Align the pointer with the first letter of the key
4. Find the coded letter on the outside wheel and record the corresponding letter
5. Repeat step 3 & 4 until the entire message is decoded. Make sure you are aligning the next letter in the key word as you go through the message.

Union Army Cipher

Adjustment letter: is the letter you use on the inner disk to match the number combination from the outer disk

Key number: the number combination that corresponds to the adjustment letter on the inner disk

Ending combination: predetermined letter (from inner disk) that is the signal for the end of a word or phrase

Encoding

1. Write down the message you want to encode
2. Determine the adjustment letter, key number, and ending combination and record
3. Align the wheel and record the encoded form of the message

Decoding

1. Write down the message you want to decode
2. Determine the adjustment letter, key number, and ending combination
3. Align the wheels and record the decoded form of the message

Alberti Cipher Disk

Encoding

1. Write down the message you want to encode
2. Determine the letter on the inner wheel that is the pointer
3. Determine the letter on the outer wheel that the pointer will align with and record at the front of the message* **
4. Align the wheels and record the encoded message

The letter from the outer wheel is written in the capital format and does not get encoded

You can change the letter on the outer wheel that corresponds with the pointer if you want. If you change the outer wheel letter than make sure you insert it in the message to show it changed.

Decoding

1. Write down the message you want to decode
2. Determine the pointer and then align the wheels
3. Record the decoded message

All capital letters designate that the alignment letter on the outer wheel has changed

Enigma II Encryption Machine

Encoding

1. Write down the message you want to encode
2. Determine the gear order for the message and create a three letter key word
3. Align the gears in order and key letters with the arrows
4. Align the letter being encoded with the arrow for the third gear (3rd gear (far right) is unencoded letters)
5. Record the letter that aligns with the arrow on the first gear
6. Repeat steps 4 & 5 until the entire message is encoded. Go back and forth between the first gear and second gear for the encoded letter.

Decoding

1. Write down the message you want to decode
2. Figure out the gear order and the key word for the message
3. Align the gears in order and key letters with the arrows
4. Align the letter being decoded with the arrow for the first gear (far left)
5. Record the letter that aligns with the arrow on the third gear
6. Repeat steps 4 & 5 until the entire message is decoded. Go back and forth between the first gear and second gear for the letter being decoded.

16” Alchemy Cipher

Encoding

1. Write down the message you want to encode
2. Determine the key for the message and align the wheels
3. Encode the plain text letter into symbols and record the coded message

Decoding

1. Write down the message you want to decode
2. Find the key and align the wheels
3. Find the symbol and then record the corresponding plain text letter

Jefferson Cipher Wheel

Encoding

1. Write down the message you want to encode
2. Starting with the row furthest to the left spell out as much of the message as possible without spaces.

3. Choose which column of encoded text you want to use and right it down.
4. Repeat step 2 & 3 until the entire message is encoded.

Decoding

1. Write down the message you want to decode
2. Starting with the row furthest to the left spell out as much of the encoded message as possible without spaces.
3. Slowly turn the wheel (using the handles) until you find the plain text row and write down the plain text.
4. Repeat step 2 & 3 until the entire message is decoded.

Pig-Pen Cipher Ring

Encoding

1. Write down the message you want to encode
2. Draw the pig-pen symbols for the letter

Decoding

1. Write down the message you want to decode
2. Write the letter that corresponds to the pig-pen symbol below symbols

Caesar Cipher Medallion

Encoding

1. Write down the message you want to encode
2. Choose a secret shift number and place it in the square window
3. Find the non-coded letter of what you want to encode. The inner ring is non-coded letters. The outer ring is coded letters.
4. Recorded the coded message below non coded
5. Repeat steps 3 & 4 until the entire message is coded.

Decoding

1. Write down the message you want to decode
2. Find the secret code number and put it in the square window
3. Find the coded letter of what you want to decode. The outer ring is coded letters. The inner ring is non-coded letters.
4. Recorded the decoded message below the coded message
5. Repeat steps 3 & 4 until the entire message is decoded.