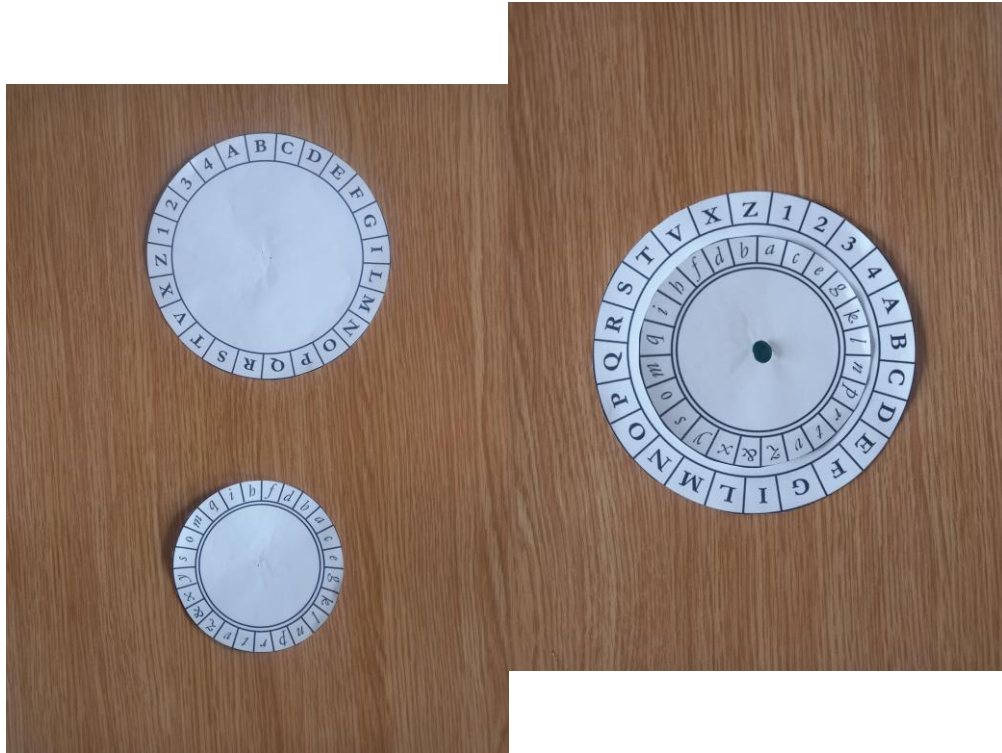


## Cipher Disk Instructions

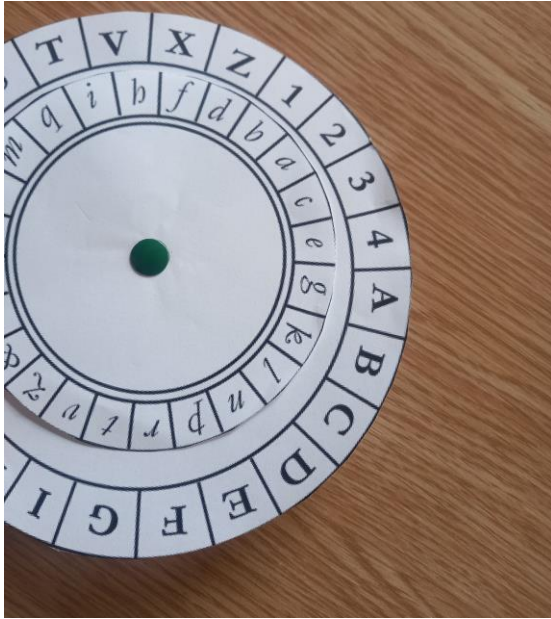
### To Encipher a Message:

1. Cut out the two disks. Place the smaller the disk in the middle of the larger disk. Fix them together at the centre with a pin, or piece of string, which acts as the axis.



2. The larger disk, which contains uppercase letters, is used for plain text. The smaller disk, with the smaller letters, indicates the cipher text. Choose a reference letter from the outer disk and then choose an index letter from the smaller disk. Line up the index letter from the smaller disk with the reference letter from the outer disk. This position determines the system of substitution that you will use to encipher your message.

In this example (see photo), the reference letter is 'B' and the index letter is 'k.' This means that C=l, D=n, E=p etc.



3. Write down the reference letter and index letter. In this example, 'Bk'.
4. Keeping the disk in the same position, write down the lowercase letters, from the smaller disk, which correspond to the letters of the plain text of your message, which are indicated by the larger disk.

In this example, the plain text message 'SALVE' would be enciphered as:

**B**kqgzhp

5. Change the index letter every three or four words in order to make your message more difficult to decipher. You can indicate the new reference letter by using an uppercase letter. The following lowercase letter is the new index letter.

For example, **B**kqgzhp**R**adexd&e stands for 'SALVE CAESARE'.

### To Decipher a Message:

1. Take your cipher disk, match up the reference letter on the outer disk, which is indicated by an uppercase letter at the beginning of the message, to the index letter, which is indicated by a lowercase letter that follows the reference letter.

In this example, 'Lxnlinsos', 'L' is the reference letter and 'x' is the index letter.

2. After you have positioned the disks correctly, write down the uppercase letters that correspond to the lowercase letters of message. An uppercase letter indicates a new reference letter, the following lowercase letter is the new index letter – these letters are not part of the plain text.

3. Can you decipher the message? **L**xnlinsosZilaepolprzslmt