

Caesar Ciphers

REMINDER:

The outer ring of your Caesar Wheel represents the letters that make up your **ACTUAL** message (“plain text”). These are written in the lower case. The inner ring of your Caesar Wheel shows you the letter you need to write in your **CODED** message (“cipher text”). These are written in the upper case.

Encryption

Try to encrypt the following phrases with your **3 SHIFT** Caesar Wheel:
(Remember to write the encrypted message in **CAPITALS**)

1. Thank you _____
2. Telephone _____
3. Codebreaker _____
4. Croaking frog _____
5. A long walk _____

Decryption

Can you decipher the encrypted messages with your **3 SHIFT** Caesar wheel?
(Remember to write the decrypted message in the **lower case**)

6. FLSKHUV _____
7. IORZHU _____
8. SODQHW _____
9. VPLOH _____
10. PDWKV LV IXQ _____

Extension: Encrypt or Decrypt these phrases using a shift of 3:

11. The aliens were from Mars

12. KHOS! ZH’UH VWUDQGHG!

13. The enemy base is in the north

14. WKH TXLFN EURZQ IRA MXPSV RYHU WKH ODCB GRJ

Your Own Messages

How to make your own Caesar Wheel:

1. Use your blank Caesar wheel. Add “plain text” letters in lower case around the outside ring.
2. Decide what your key (shift) is going to be and write it here: _____
3. Now you need to work out what letter would go under ‘a’.
4. To do this put your finger on ‘a’ and count round clockwise the number of your shift, this is the letter to be written under ‘a’. (E.g. For a shift of 2, count 2 places clockwise from ‘a’ and you will get ‘c’, which you need to write under ‘a’ in **CAPITALS**.)
5. Then continue writing the alphabet clockwise around the inner ring of your Caesar Wheel. When you get to ‘Z’, continue your alphabet from ‘A’.
6. Write all letters in the inner ring in **CAPITALS**.

Now try creating your own encrypted message:

- a) What is your key (shift)? You used it when creating your Caesar wheel.

b) What is the message you want to encrypt?

c) What is your encrypted message?

Mystery Message:

Now write a different encrypted message (using the shift you used to create your Caesar Wheel) for the person sitting next to you to decrypt (Remember to tell them the **KEY**)

Key: _____

Encrypted message:

Decrypted message: (get a friend to work this out)
