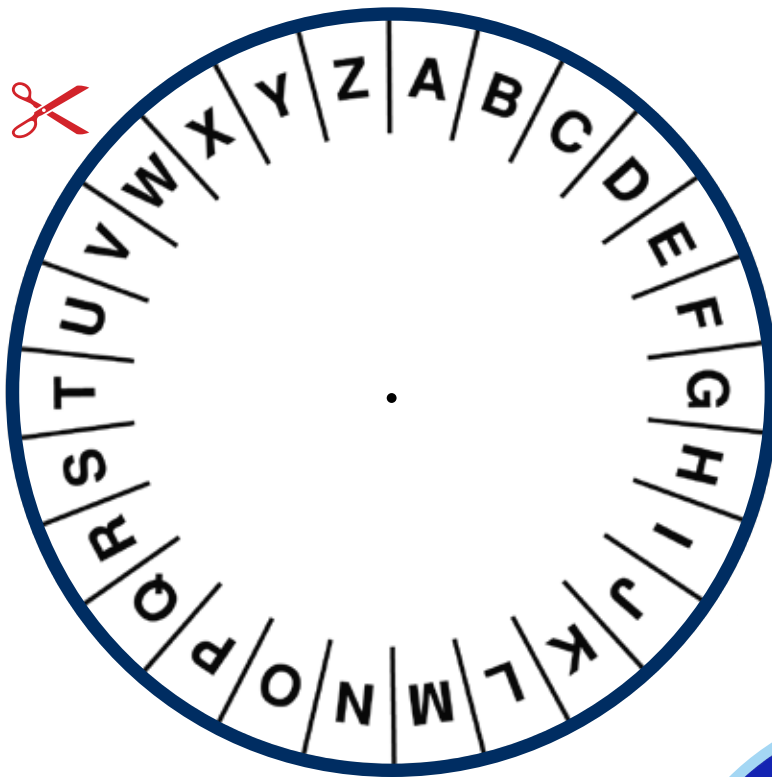


ROYAL SIGNALS MUSEUM

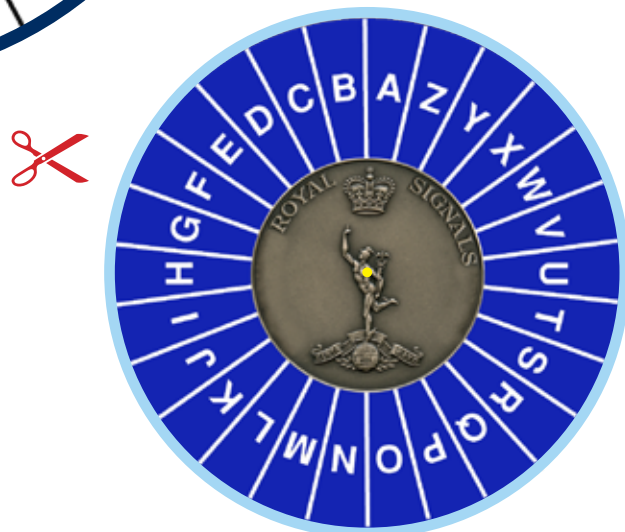
ROYAL SIGNALS CRYPTO CLUB CODE WHEEL

Large and Small Code Wheel Cutouts

1. To begin making your code wheel, first cut out the images below. Once you have completed cutting out the discs, follow the directions below to finish your code wheel. After you have created your disc use the Encryption and decryption page to learn how to use the wheel correctly.



This is how it should look when complete.



Notice that the text on the smaller wheel is back to front !
This makes the code harder to break.

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CRYPTO CLUB CODE WHEEL

A. Materials

1 x Tack, 1 x Small Code Wheel, 1 x Large Code Wheel, 1 x rubber, 1 Pair of scissors.

B. Directions

1. Print out the template page on to card or print it on paper and then glue it
2. Cut out both discs.
3. Place the smaller disc on top of the larger one and stick a fastening stud through the centre of both.



C. Encrypting a code

1. Pick a letter from the small disc on the top - this will be the KEY that will be shared with your friends so that they can decrypt the message. Once you have picked your letter line it up with the "A" on the large bottom disc.

For example:

Small Disc = M lined up with Large Disc = A KEY = A:M

2. Write your message on a pad and begin encrypting each letter of your secret message. Find the first letter of your message on the large wheel and write down the letter that appears beneath it on the small wheel. For example: ADVANCE becomes

A D V A N C E
M J R M Z K H

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
M	L	K	J	I	H	G	F	E	D	C	B	A	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

3. Continue finding each letter until your code has been encrypted. Once you have finished, send your friend the message the encrypted message only. Followed by the KEY.



Try decrypting this one using the same KEY A:M

VYOMB UEGZMBU ASUISA

