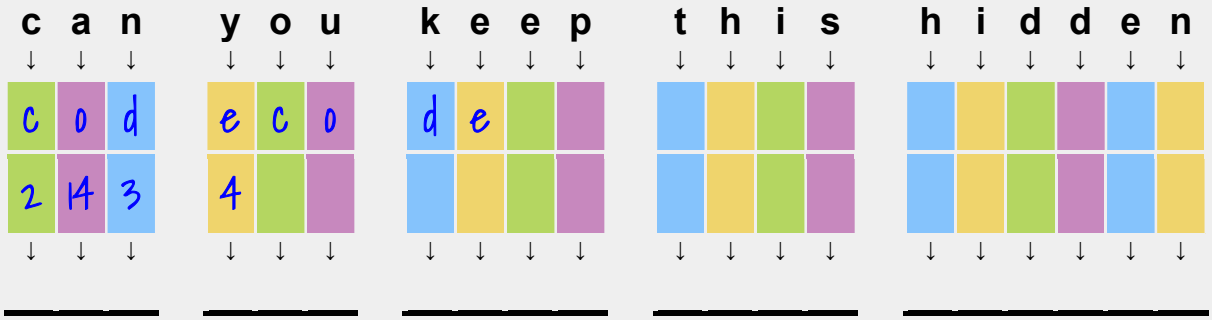
Use your cipher wheel to encrypt these messages with Vigenère ciphers

Check out the Hint below to help and save you counting!

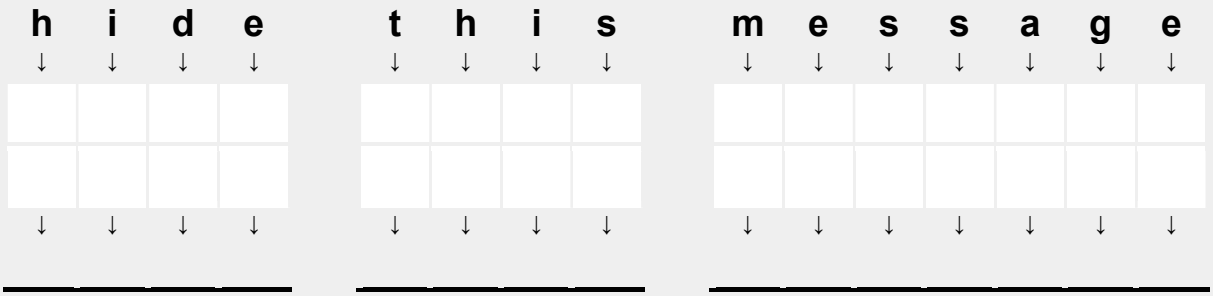
Task 1.1: Hide this message

Encrypt “can you keep this hidden” using the key **“code”**.
We’ve done some of the work for you. .



Task 1.2: Hide another

Encrypt “hide this message” using the key **“key”**.



Hint

Counting the wheel can take a long time. You can use this table to look up the indexes of the letters:

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
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

You might also like to write these numbers under the letters on the inner (purple) circle of your wheel. You can use them to quickly turn your purple wheel for a particular key.

Use your cipher wheel to decrypt these Vigenère encrypted messages

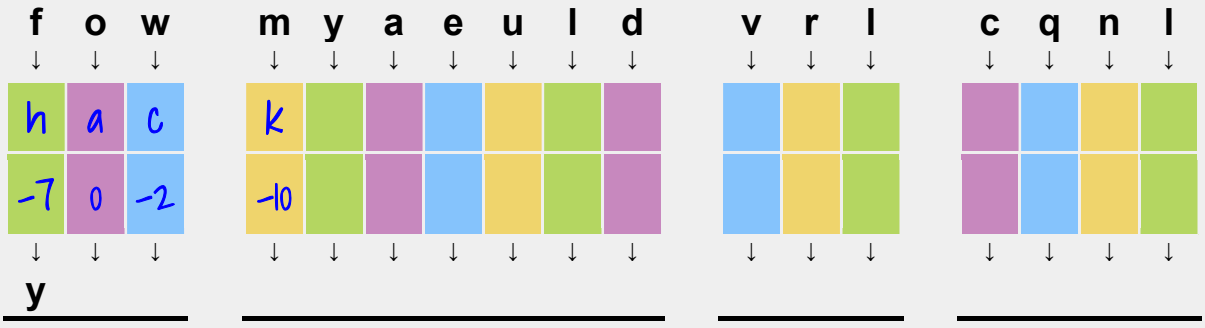
Just like your Caesar cipher code, use the negative of each letter in the key to decrypt the message.

To use your cipher wheel to decrypt the first letter in the message below:

- rotate inner purple wheel -7 (i.e. clockwise 7) (green H should line up with purple A)
- find the letter you are decrypting on the green outer wheel (F)
- get its matching letter on the purple inner wheel (Y) - this is the decrypted letter - write it in the first space below

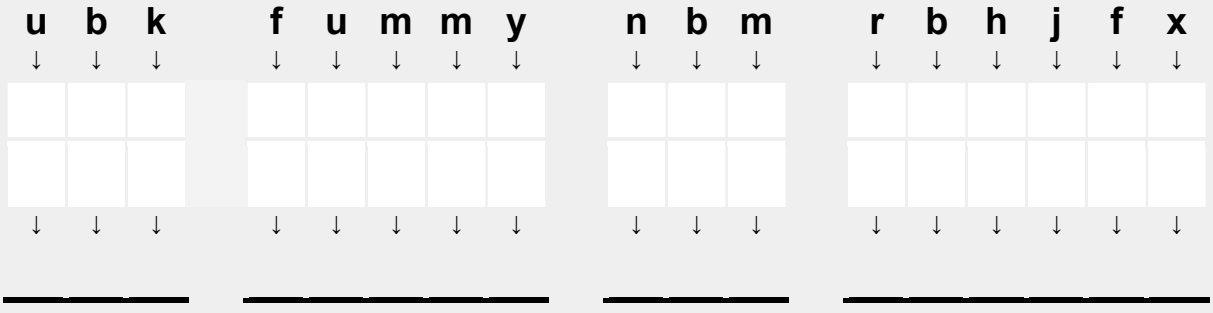
Task 1.3: Uncover the message

Can you **decrypt** this message using the key **"hack"**.
We've done some of the work for you. .



Task 1.4: Crack another

Can you **decrypt** this message using the key **"bug"**.



Task 4.1: Counting keys

Now it's your turn!

Let's use the keyword "**code**"

What number should we use to divide and find the remainder? _____
Use this number to fill in the remainder line
Fill in the Key Letter line using the keyword

Message	c	r	y	p	t	o	g	r	a	p	h	y
Count	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Remainder												
Key letter												

The way that we get the computer to figure out a remainder is by using modulo like this:
`remainder = 5%3`
This will make remainder = 2 since the remainder of 5 ÷ 3 is 2