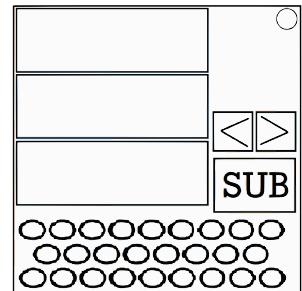


## On the Subject of the Green Cipher

*It ain't easy being green. Nor is it easy being a cipher.*

On the module, you will see 3 screens, a keyboard, 2 arrows, and a submit button that displays the current page you're on.



Pressing the right arrow takes you to the next page. Pressing the left arrow takes you to the previous page. There is a total of 2 pages.

On page 1, the top screen shows a 6 letter encrypted word, the middle and bottom screen shows an 6 digit number.

On page 2, the top screen an 3 letter configuration, the middle screen shows a number.

Follow the mechanics down below to decrypt your word:

### Step 1: Homophonic Cipher

Catenate the middle and bottom screen on page 1 to one string of numbers. Split the numbers into 6 pairs.

Next, config the table below so that the lowest value in that row is underneath the letter that is shown on the top screen of page 2. Ex: TOK means that 01 is under T, 27 is under O, and 53 is under K.

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
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78

For each pair of numbers, find it in the table and use that column to get a letter.

You should now have a decrypted keyword that will be used in step 3 so hang on to it.

### Step 2: Columnar Transposition

For this, you will need the encrypted word from the top screen of page 1 and the number from the middle screen of page 2.

Take numbers and underneath it, put 6 dashes so that it fits in the columns of the numbers.

1	2
-	-
-	-
-	-

1	2	3
-	-	-
-	-	-
-	-	-

1	2	3	4
-	-	-	-
-	-	-	-
-	-	-	-

1	2	3	4	5
-	-	-	-	-
-	-	-	-	-

1	2	3	4	5	6
-	-	-	-	-	-
-	-	-	-	-	-

In ascending order, take the encrypted word and replace all the dashes under the number with the letters.

Finally, read the letters in reading order to get a new order of letters.

### Example

QWERTY + 3241 => RWYQTE

3	2	4	1
R	W	Y	Q
T	E		

### Step 3: Mechanical Cipher

Using the keyword you decrypted from step 1 and the encrypted word after doing step 2, follow the steps below.

Take the first letter from the keyword and use that as the row.

Find the first letter of the encrypted word in that row to get a column.

That column is the new decrypted letter for the word.

Do this for each letter of both words to get your decrypted word.

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

Once you finally have your decrypted word, you can submit it. Once you start typing, all the screens will go black and the bottom screen will show what you are typing.

To clear it, just click one of the arrows. This goes to one of the pages and clears any input you put in. It will not let you go over 6 letters on input.

Once you are satisfied with your input, press the button labeled "SUB" to submit your answer. On a strike, the module will go back to the first page of the module, but it does not regenerate.