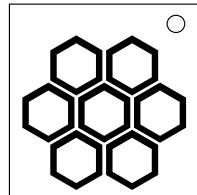


On the Subject of Colored Hexabuttons 2

The sequel!

Depending on the color of the buttons will determine which instructions that you need to follow. Find the header with the color's name and follow the instructions in that section.



Red Hexabuttons

Each of the non-center buttons' leds will be pointing in a direction. Refer to the table below to see which button is assigned which direction:

	TL	TR	ML	MR	BL	BR
UP	LEFT	UP	DOWN	RIGHT	UP	RIGHT
RIGHT	UP	LEFT	RIGHT	DOWN	DOWN	LEFT
DOWN	DOWN	RIGHT	LEFT	UP	RIGHT	UP
LEFT	RIGHT	DOWN	UP	LEFT	LEFT	DOWN

Pressing the center button will play a text-to-speech message consisting of a number and a letter. Start in the space on the table below where the number/letter intersects:

	A	B	C	D	E	F
1	ML	BL	TR	TL	MR	BR
2	TL	ML	BR	MR	TR	BL
3	BL	MR	TL	TR	BR	ML
4	MR	TL	BL	BR	ML	TR
5	BR	TR	MR	ML	BL	TL
6	TR	BR	ML	BL	TL	MR

Follow the instructions below:

- Press the button that correlates to the space that you are currently on.
- From the space you're currently on, move in the direction in the table that was assigned to the button that you pushed in the previous step.
- If this next space has a button that's already been pressed, keep moving in that direction, wrapping around when necessary until you reach a space that contains a button that hasn't been pressed yet.

Repeat the instructions until all 6 buttons have been pushed to disarm the module.

Pressing the buttons in the wrong sequence will result in a strike after 6 button presses, resetting all input. Pressing the center button will also reset all input.

Orange Hexabuttons

Press the center hexabutton to receive a text-to-speech message consisting of a 5 digit number. Pressing it will also reset any input you have made. Create a matrix of 5x5 letters of the alphabet excluding the Z.

Write the 5 digit number on the top and left side of the matrix like so:

	4	3	1	2	5
4	A	B	C	D	E
3	F	G	H	I	J
1	K	L	M	N	O
2	P	Q	R	S	T
5	U	V	W	X	Y

Rearrange the matrix so that the numbers are in ascending order:

	4	3	1	2	5
4	A	B	C	D	E
3	F	G	H	I	J
1	K	L	M	N	O
2	P	Q	R	S	T
5	U	V	W	X	Y

	1	2	3	4	5
4	C	D	B	A	E
3	H	I	G	F	J
1	M	N	L	K	O
2	R	S	Q	P	T
5	W	X	V	U	Y

	1	2	3	4	5
1	M	N	L	K	O
2	R	S	Q	P	T
3	H	I	G	F	J
4	C	D	B	A	E
5	W	X	V	U	Y

Pressing an non-center button will place a piece on the matrix at the same spot as the letter displayed on the button. Pressing a 2nd non-center button will cause the piece to move to that letter's space, storing the distance between the 2 letters.

Press all 6 buttons in such a way that the distance being stored is greater than the previous stored distance to disarm the module. If any distance is less than or equal to its previous distance, the module will strike after 6 buttons have been pressed, resetting all input. Pressing the center button will also reset all input.

Yellow Hexabuttons

Each of the non-center buttons will either toggle the 2 mazes you are in or move you in a direction. To figure out which button does what, use the priority list that corresponds to the center button's shapes.

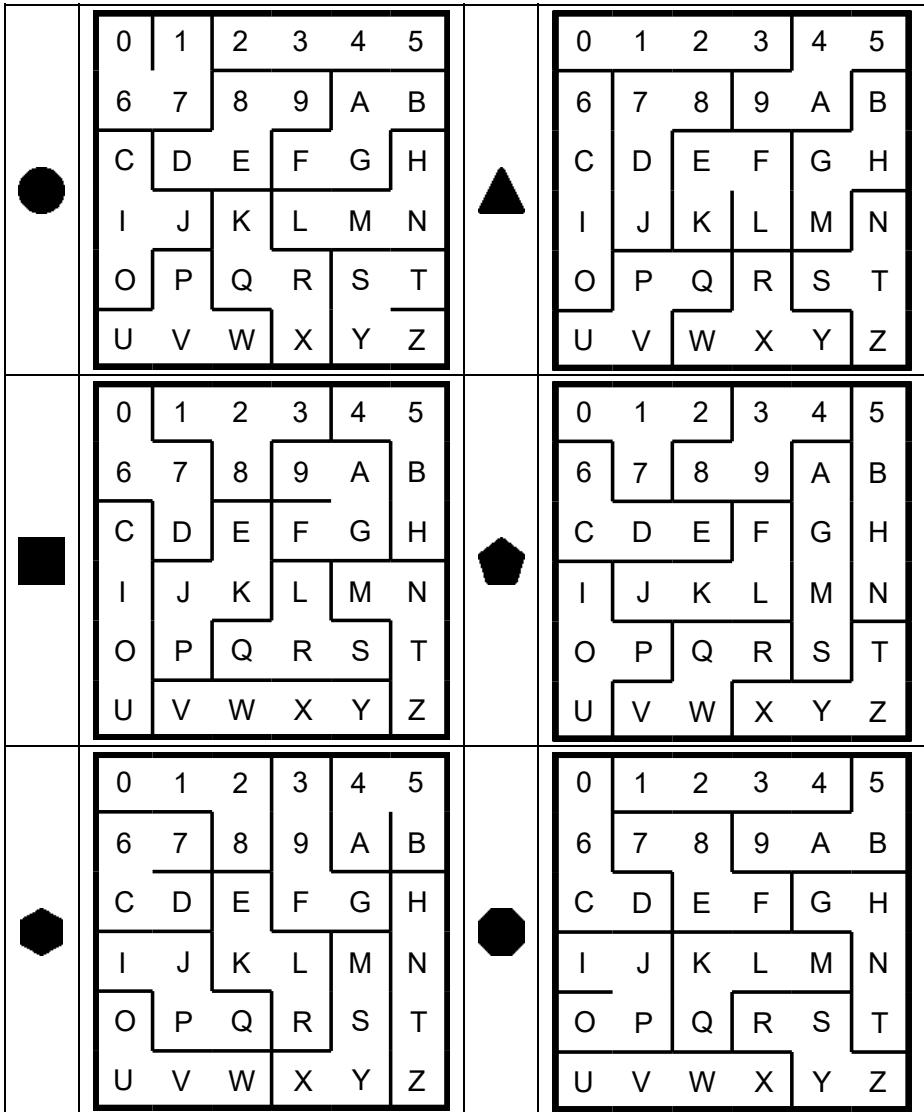
The 1st shape in the list that is also present on the module will toggle that shape's maze. The 2nd shape will toggle the 2nd shape's maze. The 3rd shape will move you up. The 4th shape is right. The 5th shape is down. The remaining button will move you left.

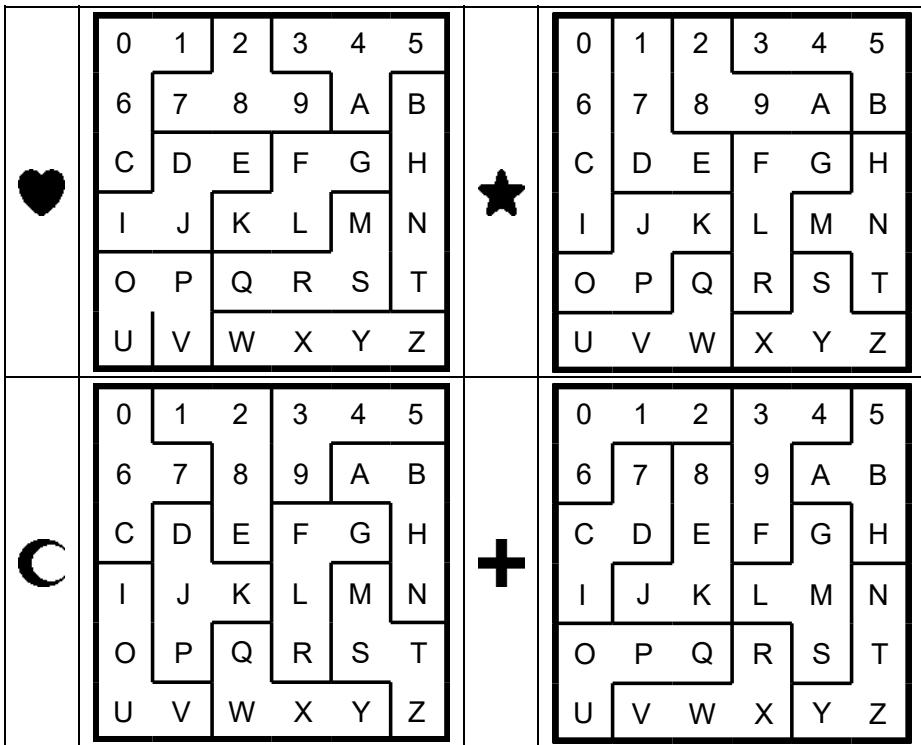
Priority List

●	● + ○ △ ■ ★ ☽ ☾ ▲
▲	○ ● + ■ △ ○ ☽ ☾ ★
■	△ ○ ☽ + ● ★ ○ △ ○
○	○ ○ ★ △ ○ ○ ☽ ○ + ■
△	+ ○ ○ ☽ ○ ○ ☽ ○ ○
○	★ ○ △ ○ ○ ☽ ○ ○
★	■ ○ ○ ☽ ○ ○ ○ ○
☽	○ ○ ○ ○ ○ ○ ○ ○
☽	○ ○ ○ ○ ○ ○ ○ ○
+	○ ○ ○ ○ ○ ○ ○ ○

Pressing the center button will start playing a text-to-speech message that will output 2 characters. The first character represents the current location you're at in the mazes. The 2nd character represents the location of the goal space. The active maze by default will be the maze cooresponding to the 1st shape in priority order.

Press the buttons in such a way that you'll land on the goal space without crossing any walls to disarm the module. Any attempt to cross any wall will result in a strike, resetting the module. Pressing the center button will also reset the module.





Green Hexabuttons

When not in recording mode, you can press any non-center button as many times as you'll like. Each button will play a note when pressed.

One of the non-center buttons will display the note that it is playing. Compare this button to the rest of them to figure out what the other notes the buttons are playing.

The center button will display 3 characters. Use the table below using each character to get the order of the notes to be read:

0	TR MR	6	ML MR	C	BR MR	I	ML BL	O	TR BR
1	TL MR	7	MR ML	D	BL TL	J	TL ML	P	BR TR
2	TR ML	8	MR TL	E	MR BL	K	ML TR	Q	BL MR
3	BL BR	9	BL TR	F	TR BL	L	ML BR	R	TR TL
4	TL TR	A	BR BL	G	BL ML	M	BR ML	S	MR BR
5	MR TR	B	BR TL	H	TL BL	N	TL BR	T	ML TL

Finally, take each note and its position in the table below to get the order that the buttons need to be pressed while in recording mode:

	C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B
1	MR	BR	TR	ML	BL	TL	ML	BR	TR	TL	MR	BL
2	BL	TL	MR	TR	ML	BR	TL	MR	BR	TR	BL	ML
3	TL	ML	BR	BL	TR	MR	MR	ML	BL	BR	TR	TL
4	BR	BL	ML	TL	MR	TR	TR	BL	TL	MR	ML	BR
5	ML	TR	TL	MR	BR	BL	BL	TL	MR	ML	BR	TR
6	TR	MR	BL	BR	TL	ML	BR	TR	ML	BL	TL	MR

To enter recording mode, press the center button. It will start flashing indicating recording mode. One way to get out of recording mode is to press the center button again. The second way to get out of recording mode is to strike on the module by pressing a button in the wrong order.

When getting out of recording mode, the center button will no longer flash, and any buttons that were pressed will be back up.

Advanced Music Knowledge

Intervals: An interval is the distance between 2 pitches. There are 12 distinct intervals that our ears can differentiate. The audio files down below plays each distinct interval with the info above it being the interval name followed by the distance between the 2 notes:

Perfect Unison: 0	Minor 2nd: 1
0:00 / 0:03	0:00 / 0:03
Major 2nd: 2	Minor 3rd: 3
0:00 / 0:03	0:00 / 0:03
Major 3rd: 4	Perfect 4th: 5
0:00 / 0:03	0:00 / 0:03
Tritone: 6	Perfect 5th: 7
0:00 / 0:03	0:00 / 0:03
Minor 6th: 8	Major 6th: 9
0:00 / 0:03	0:00 / 0:03
Minor 7th: 10	Major 7th: 11
0:00 / 0:03	0:00 / 0:03

Ex: Using the keyboard below, the distance between D and F is 3 which makes it a Minor 3rd.



Blue Hexabuttons

The symbols written on each button references to a value that is assigned to that button. Find the symbol on the table below to find out which value it is:

ζ	25	¢	32	U	34	\equiv	2	T	36	β	31
Γ	8	σ	7	Λ	17	Σ	33	$\$$	26	Ω	19
γ	13	\vee	5	λ	10	£	14	l	15	ω	30
η	23	ρ	1	δ	3	Ψ	24	α	28	κ	12
ξ	22	ε	21	Δ	35	θ	18	φ	6	π	29
Θ	4	Π	9	μ	27	X	16	ζ	11	∞	20

The number written on the center button represents the starting value of N. Pressing the center button will transition into the swap phase. Each swap is associated with an operation, each one equal to F(N). Look up the operations in the tables below for each swap to get the final value of N. Each time you get a value from an operation, modulo that value by 1000.

- $X = A + B$.
- $Y = |A - B|$.
- A/B: The 2 values assigned to the buttons that swapped with each other.

	$2 N - X $		$ N - X $		$2(N + X)$
	$N + Y$		$ N - 2Y $		$ 2N - Y $
	$ N - Y $		$N + 2Y$		$ 2N - X $

	$N + 2X$		$2N + Y$		$ N - 2X $
	$2(N + Y)$		$N + X$		$2N + X$

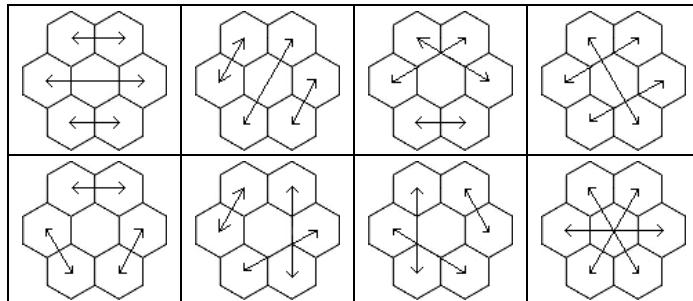
Double Swaps

In the case of double swaps, take the 2 positions that didn't swap and use the operation for it (Always round down):

TL TR	$ F1(N) - F2(N) / 2$	TR ML	$F1(N) + F2(N)$	ML BL	$\min(F1(N), F2(N)) / 2$
TL ML	$2\max(F1(N), F2(N))$	TR MR	$2\min(F1(N), F2(N))$	ML BR	$2(F1(N) + F2(N))$
TL MR	$ F1(N) - F2(N) $	TR BL	$ F1(999 - N) - F2(999 - N) $	MR BL	$(F1(N) + F2(N)) / 2$
TL BL	$\max(F1(N), F2(N))$	TR BR	$\max(F1(N), F2(N)) / 2$	MR BR	$999 - F1(N) - F2(N) $
TL BR	$2 F1(N) - F2(N) $	ML MR	$F1(999 - N) + F2(999 - N)$	BL BR	$\min(F1(N), F2(N))$

Triple Swaps

If the triple swap is present in the list below, use function O. Otherwise use function P.



O	$\max(F1(N), F2(N), F3(N))$
P	$\min(F1(N), F2(N), F3(N))$

Create a digit string using the initial and final values:

Digit #1: Sum of the Hundreds digits, modulo 10
Digit #2: Sum of the Tens digits, modulo 10
Digit #3: Sum of the Ones digits, modulo 10
Digit #4: Difference of the Hundreds digits
Digit #5: Difference of the Tens digits
Digit #6: Difference of the Ones digits

Place a 1 under the lowest digit, then a 2 under the 2nd lowest digit, and so on. If there are any ties, label the tied leftmost number first, then the next tied leftmost number, and so on. This will be your value order.

To disarm the module, press the buttons in such a way that the values assigned to each button are in the value order with 1 being the lowest value and 6 being the highest value.

Pressing the buttons in the wrong order will give you strike after all 6 buttons have been pressed, resetting all input. Pressing the center button while any button has been pressed will also reset all input. If no button has been pressed, then it will take you back to the initial state of the module.

Purple Hexabuttons

Each of the non-center buttons have been assigned a letter with a number. Use them in the table below to get a value:

	A	B	C	D	E	F
1	01	07	21	25	33	35
2	12	02	08	22	26	34
3	17	13	03	09	23	27
4	28	18	14	04	10	24
5	31	29	19	15	05	11
6	36	32	30	20	16	06

Press the buttons in ascending order to disarm the module. The only problem is, you have to deduce what letter/number is given to each non-center button.

Pressing the center button will display a number followed by a text to speech message. The number represents which clue you are currently on. The message is a clue that has been encrypted.

The 1st character represents the clue message being used. The 2nd character represents the variable X in the message. The character(s) after that represent the group Y in the message.

QZ5	Position [X] does have one of these numbers: [Y]
NOR	Position [X] does not have any of these numbers: [Y]
EW2	Position [X] does have one of these letters: [Y]
BU7	Position [X] does not have any of these letters: [Y]
C48	Number [X] is in one of these positions: [Y]
VX9	Number [X] can't be in any of these positions: [Y]
DLY	Number [X] is grouped up with one of these letters: [Y]
HJM	Number [X] is not grouped up with any of these letters: [Y]
KS3	Letter [X] is in one of these positions: [Y]
PTO	Letter [X] can't be in any of these positions: [Y]
All	Letter [X] is grouped up with one of these numbers: [Y]
FG6	Letter [X] is not grouped up with any of these numbers: [Y]

The characters after the first character will always be a number. Use the table below to convert the number to the appropriate type used in the clue:

1	2	3	4	5	6
A	B	C	D	E	F
TL	TR	ML	MR	BL	BR

Each Number/Letter is used once for the entire puzzle. If a number is deduced to being paired with a position/letter, the rest of the positions/letters can't use that number. Below is a deduction table that you are free to use. If you are unsure how to use it, I suggest watching this [video](#).

	TL	TR	ML	MR	BL	BR	A	B	C	D	E	F
1												
2												
3												
4												
5												
6												
A												
B												
C												
D												
E												
F												

Pressing the buttons in the wrong order will give you a strike after all 6 buttons have been pressed, resetting all input. Pressing the center button will also reset all input.

White Hexabuttons

Start by pressing the center button. This will cause each button to flash a color. The order that the colors flashed in represents the finished state of the puzzle.

The button's position that the color flashed at is the button's assigned color. Read the non-center buttons in reading order to represent the beginning state of the puzzle.

The puzzle consists of a 2x3 grid, consisting of all 6 colors but one. The one that is absent is the one present on the center button when hovered over:

1	2
3	4
5	6

The numbers represents the order that the colors go for both the beginning and finished state. Pressing a non-center button will slide the color that is assigned to it into the empty space. If it is unable to, then it won't move at all.

Press the non-center buttons in such a way to get the beginning state to the finished state. Once you feel like you have created the finished state, press the button that corresponds to the absent color to submit your answer.

If you have correctly made the finished state, the module will be disarmed. If not, the module will strike you and it will reset to the beginning state. Pressing the center button will also reset the puzzle to the beginning state.

Gray Hexabuttons

Each non-center button is assigned a letter between A – F. Each letter will be unique.

Pressing the center button will cause the center button to flash, signaling that it is in submission mode. Pressing the center button again will cause it go to out of submission mode.

Press the buttons in ABCDEF order while in submission mode to disarm the module. Pressing them in the wrong order will cause the module to strike, and will exit out of submission mode.

The center button will display the current letter. When a non-center button is pressed, the new displayed letter will be using one of the tables on the next page, using the pressed button's letter as the row and the current displayed letter as the column.

	A	B	C	D	E	F
A	D	C	E	A	B	F
B	A	D	B	C	F	E
C	B	E	C	F	D	A
D	F	B	D	E	A	C
E	E	A	F	D	C	B
F	G	F	A	B	E	D

	A	B	C	D	E	F
A	E	D	C	F	B	A
B	C	F	E	D	A	B
C	D	B	F	A	C	E
D	A	C	B	E	F	D
E	B	E	A	C	D	F
F	F	A	D	B	E	C

	A	B	C	D	E	F
A	C	D	A	F	E	B
B	D	E	B	A	C	F
C	E	A	F	D	B	C
D	B	F	G	E	D	A
E	F	B	D	C	A	E
F	A	C	E	B	F	D

	A	B	C	D	E	F
A	F	A	E	D	C	B
B	B	F	A	C	E	D
C	C	D	B	E	A	F
D	E	B	D	A	F	C
E	A	C	F	B	D	E
F	D	E	C	F	B	A

	A	B	C	D	E	F
A	B	C	E	D	F	A
B	F	B	A	C	D	E
C	A	E	D	F	B	C
D	D	F	G	E	A	B
E	C	A	F	B	E	D
F	E	D	B	A	C	F

	A	B	C	D	E	F
A	A	E	B	F	C	D
B	E	B	F	G	D	A
C	F	D	C	B	A	E
D	G	F	D	A	E	B
E	D	C	A	E	B	F
F	B	A	E	D	F	C

	A	B	C	D	E	F
A	C	B	F	A	D	E
B	E	A	D	C	B	F
C	D	E	C	F	A	B
D	F	C	A	B	E	D
E	B	F	E	D	C	A
F	A	D	B	E	F	C

	A	B	C	D	E	F
A	D	C	B	F	E	A
B	B	D	E	C	A	F
C	A	F	D	B	C	E
D	E	B	F	A	D	C
E	F	A	C	E	B	D
F	C	E	A	D	F	B

	A	B	C	D	E	F
A	F	C	E	D	B	A
B	G	B	F	E	A	D
C	B	D	C	A	F	E
D	A	E	B	F	D	C
E	E	A	D	B	C	F
F	D	F	A	C	E	B

	A	B	C	D	E	F
A	B	D	E	A	C	F
B	A	C	F	E	D	B
C	F	A	B	C	E	D
D	G	F	A	D	B	E
E	D	E	C	B	F	A
F	E	B	D	F	A	C

	A	B	C	D	E	F
A	A	F	E	B	C	D
B	F	E	B	D	A	C
C	E	D	A	C	B	F
D	D	C	F	A	E	B
E	C	B	D	E	F	A
F	B	A	C	F	D	E

	A	B	C	D	E	F
A	E	F	B	D	C	A
B	D	A	E	C	B	F
C	C	D	F	A	E	B
D	B	E	C	F	A	D
E	A	C	D	B	F	E
F	F	B	A	E	D	C

Black Hexabuttons

You will need a 6 character code. To start off, hover over the center button. This will cause each of the buttons to light up with different levels of brightness. Use the button's position as well as the brightness (with 0 being pitch black) on the table below to get the button's priority level:

	0	1	2	3	4	5
TL	35	33	25	21	07	01
TR	34	26	22	08	02	12
ML	27	23	09	03	13	17
MR	24	10	04	14	18	28
BL	11	05	15	19	29	31
BR	06	16	20	30	32	36

'Read' the buttons in descending priority level to get your 6 character code.

To read a button, hover said button and use the lit up button's position as the column. Press the hovered button to get a sequence of 3 pitches. Use this sequence as the row on the table below:

	TL	TR	ML	MR	BL	BR
LMH	O	6	C	I	O	U
LHM	1	7	D	J	P	V
MLH	2	8	E	K	Q	W
MHL	3	9	F	L	R	X
HLM	4	A	G	M	S	Y
HML	5	B	H	N	T	Z

L - Low Pitch

M - Medium Pitch

H - High Pitch

Split the 6 character code into 3 pairs. For each character pair, find it in the tables on the next page to get a row and column. This should give you 4 numbers for each character pair, giving you a sequence of 12 numbers in total.

Treating the non-center buttons as if they are labeled 1-6 in reading order, press the buttons according to the number sequence while in transmit mode to disarm the module.

To enter transmit mode, press the center button. This will cause the button to flash indicating that it is in transmit mode. You can exit out of the transmit mode at any time by pressing the center button.

Pressing the buttons in the wrong order while in transmit mode will cause the module to strike. However, it won't strike until 12 buttons have been pressed.

	11	12	13	14	15	16	21	22	23	24	25	26	31	32	33	34	35	36
11	QB	PX	B9	AJ	J4	SZ	1T	HK	2A	FQ	UM	9D	75	CN	ZW	RY	WO	LO
12	R3	4V	ME	VX	HM	JA	T8	FT	EL	WU	OB	KW	L5	PK	D4	8Y	ZO	U6
13	SM	DB	8Q	OC	CY	9A	PJ	K7	26	6V	ZS	H2	30	II	OP	GO	LD	XL
14	AF	F8	G2	OZ	SV	50	LM	2B	6Y	9E	7Q	ZN	RJ	IU	KA	X1	H4	3I
15	80	6C	A9	UA	WQ	RO	PL	2E	FG	3X	4J	1H	9F	DD	NY	ZM	X4	L2
16	3V	70	93	DA	JQ	RD	F7	YY	SO	QH	0M	LN	6I	AC	G8	ZE	SS	TR
21	7V	NN	RS	PO	OO	MB	8F	W5	IT	K2	Z9	YJ	LL	TA	U4	2R	DP	E1
22	QN	AY	OM	FS	MT	N9	G6	HG	R1	VA	YP	CJ	3L	Z8	5K	SF	EC	KD
23	50	N3	2Z	RL	X6	UG	HW	GK	D2	BI	WT	ID	F5	8V	C4	YA	MH	S7
24	DW	IM	EQ	NO	XC	W4	VO	UL	8B	ZY	FH	22	47	KK	T6	Q3	91	MJ
25	S8	TG	5H	7P	66	1U	FR	P9	BS	GD	8K	02	V4	RA	IO	4Q	DM	WJ
26	72	KE	AH	OY	HO	SS	BM	2N	QZ	1F	3K	XJ	9V	R7	09	LT	6Q	CI
31	1N	OU	98	6P	FX	JE	K4	PS	SJ	E6	OY	GB	NT	40	X5	80	ML	ZG
32	D9	RK	1Y	YC	S2	O1	HS	7W	JD	85	L6	ZZ	40	UE	BU	N7	VR	PA
33	RW	JZ	OF	V6	OO	YQ	49	8H	51	GR	B5	NU	WB	6X	TM	DN	P2	10
34	42	A6	IE	M9	9K	2M	YD	84	OZ	3P	NR	DY	ES	HV	CO	LU	G7	TB
35	7K	OT	6S	W8	1R	9W	C1	MA	I5	DV	SI	QY	H7	LC	XO	RG	5E	VQ
36	BB	1Q	DJ	45	LP	PY	OA	ST	OW	R9	HU	QX	X3	CZ	6L	UO	97	28
41	S3	6G	QC	82	EB	19	HE	TF	BO	2D	AV	UQ	FP	96	7U	YM	3A	DT
42	HP	FD	NV	1Z	ZO	PI	OK	87	XM	IW	VO	A4	D6	33	QS	BE	TU	SL
43	24	CV	PC	AG	VB	MZ	6D	08	TY	H5	9X	3M	5F	76	DU	4P	Z1	BA
44	P8	43	7R	3E	QF	EW	6A	JJ	KM	SC	RB	AO	5D	NP	OH	T2	V5	2V
45	V2	8J	71	DH	FB	CL	AT	BK	HO	Z6	WD	9R	YV	GW	13	UZ	2X	OI
46	AK	MI	Q6	XP	GE	5W	8S	IA	JN	ZB	1D	2L	CR	SQ	41	9J	HX	NO
51	2C	7D	00	QQ	MN	4U	F6	3H	9S	61	H8	WV	8A	Y7	I2	NI	TE	SY
52	ZL	CU	48	OE	GC	DF	8D	04	SK	XG	I7	E9	UP	FI	H1	35	AW	5B
53	PQ	Q4	ND	3R	1W	LI	YK	WF	X8	CM	EV	RE	M2	J3	UB	I1	OO	5Z
54	FU	GF	TK	C8	NJ	KO	Z7	VE	WP	QM	95	OT	UV	MD	5N	HA	1B	YL
55	6H	OS	P7	HN	3Y	7T	KZ	XB	MX	L4	QV	NM	SW	IR	WE	F1	BF	9U
56	9L	T1	JM	F3	N5	O6	7B	AE	UK	4D	62	E7	QP	Y8	5V	8G	2U	RF
61	GT	3Q	HJ	5C	DO	Q2	RP	Y9	4E	1L	6K	JR	WG	A5	V1	Z4	KS	FZ
62	3T	Q0	KC	2J	9H	L8	6W	D1	PV	CE	RU	XO	FM	BN	A7	I4	MS	4G
63	06	39	1X	IK	D7	WR	NG	XU	FC	SE	JF	MO	2H	Z5	7A	VM	88	Y2
64	J9	8R	CA	OV	PE	68	S1	Q7	HC	GO	II	1P	ZF	BL	2G	D5	NW	VU
65	OF	7L	C5	EO	UI	OB	5U	SD	GH	92	M3	DC	2Y	VS	TV	XK	H6	JO
66	IG	P6	44	JU	OD	31	9Y	NC	8L	DX	58	S5	ZJ	20	MF	7S	FE	UN

	41	42	43	44	45	46	51	52	53	54	55	56	61	62	63	64	65	66
11	K6	8E	GG	O7	VP	N2	5I	EH	XV	6U	MC	I3	Y1	D8	OR	4F	3S	TL
12	O2	7C	YS	57	KD	6R	21	3J	CF	SH	GI	AN	I2	QG	NQ	BP	10	99
13	YG	4W	QT	NK	EE	RR	M8	7Z	FF	VN	J5	AU	TH	IX	W9	U1	B3	54
14	TS	MG	17	VC	BD	DR	NX	UT	4L	PP	C9	W6	Q5	YW	83	JK	OH	E0
15	VI	J8	BT	CK	IS	O1	MW	HR	KV	TP	77	GZ	Y3	ON	QU	56	SB	E5
16	C2	NB	KL	E4	VW	B6	HF	IP	MU	15	P1	8Z	OG	UJ	2T	WX	4K	X9
21	XZ	GU	O3	S6	67	18	4H	3G	JI	CD	5M	9C	VK	AX	BW	QE	FY	HQ
22	LH	UR	TO	2I	90	7X	05	12	4Z	IV	DE	W3	8U	JW	P4	6B	B7	XQ
23	4X	E8	3B	7E	QR	VY	OS	PU	ON	AM	ZQ	9P	J1	TO	1C	LJ	K9	6F
24	O1	5X	HZ	R8	JS	7N	OE	1V	BR	LA	AP	CG	69	G5	YF	3D	PT	SU
25	ZC	9I	AB	LW	EF	JV	U3	NE	Q1	X7	CX	25	KO	MY	HT	YN	OL	3Z
26	ZD	5P	8I	IB	UX	PW	FO	4C	ER	DG	G4	NA	V8	WL	T3	YU	J6	M5
31	D3	YZ	B2	IF	CQ	2K	H9	5R	3W	RI	U7	L1	WM	QD	AA	VV	TC	7H
32	2F	CB	EG	Q8	6J	34	TQ	GV	IH	53	9N	XT	FL	OX	AI	WO	KP	MM
33	XE	C7	A3	3C	FA	HD	94	Q1	K8	UY	MP	LK	ET	2S	IL	SG	7J	ZV
34	JG	FW	OX	QL	70	VH	B8	R5	K3	W1	PF	ZI	XA	LJ	5Q	6T	SN	UC
35	JX	8N	PZ	E2	N6	UD	GP	F9	AL	OJ	23	4M	BO	KU	YB	T4	3F	ZH
36	30	GS	WN	TI	N1	MK	ED	ZR	5G	JC	FV	74	I6	8M	YE	A2	VF	KH
41	L7	YY	CS	55	RZ	XW	MO	WI	G1	JH	OK	O4	PN	VL	ZX	KJ	4R	N8
42	M1	29	WC	YR	5Y	9G	LX	7F	RQ	J2	KT	U8	65	CH	GN	OJ	EA	4B
43	GL	1E	U2	WW	S9	IO	8T	NS	XH	FJ	E3	RO	KN	J7	LQ	QK	OR	YI
44	90	14	YT	U9	ZU	C6	FK	MQ	WZ	HL	B1	XY	O7	IN	LG	8I	GX	DS
45	T5	LY	6E	JO	M7	RC	XS	SP	PM	Q9	N4	EU	4N	5A	OG	38	IQ	KF
46	DZ	WH	OV	F2	78	KG	P5	63	UO	O9	TT	BC	LF	EY	V7	RM	Y4	3U
51	UW	EJ	R4	CT	L3	G9	VZ	KX	O5	ZK	DO	5L	BG	JP	1M	AR	XF	PB
52	6N	RV	2Q	BJ	W2	QA	NH	M6	V3	LO	1S	KY	JT	9Z	TX	PR	7M	YO
53	9T	OU	VG	46	HY	79	SX	FN	2P	BH	DL	K5	60	ZA	AS	T7	8C	GJ
54	S4	A1	LR	X2	IC	BZ	7G	89	RH	OQ	EX	4S	DI	P3	JY	2W	60	36
55	AD	GQ	U5	T9	O8	YO	EI	JL	1G	CC	VJ	R6	52	20	4A	Z3	DK	8P
56	K1	MR	CW	PO	ZT	3N	IJ	B4	DQ	LZ	HH	XX	OC	V9	GY	1A	SO	WS
61	CO	SA	UU	MV	86	O3	9M	NF	27	BX	TD	EN	7Y	XI	PH	I8	LB	OW
62	59	Y5	SR	OQ	JB	WY	Z2	8X	OP	7I	TZ	NL	EK	H3	16	UF	VD	GA
63	US	RT	5J	G3	OP	OL	TN	K1	QW	64	AO	4I	9Q	HB	EZ	BY	LV	PD
64	32	OD	FO	KQ	UH	TJ	Y6	9B	EM	5T	XN	AZ	LS	4Y	M4	73	WK	RX
65	WA	QJ	37	RN	LE	I9	F4	A8	8W	BQ	6M	11	ZP	4T	KR	NZ	YX	PG
66	OA	QO	YH	VT	R2	O3	6Z	TW	GM	EP	L9	W7	XR	BV	HI	KB	AQ	1K

Brown Hexabuttons

Each non-center button is assigned an chemical symbol. Use the table below by using the 1st number as the row and the 2nd number as the column to get the chemical symbol:

	1	2	3	4	5	6	7	8
1								
2								
3								
4								
5								
6								
7								
8								

Pressing the center button will cause it to play a text-to-speech message consisting of 2 letters. The 1st letter represents the starting potion and the 2nd letter represents the goal potion. Use the letters in the table on the next page to get your potions:

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

Pressing a non-center button will mix the button's assigned chemical to the current potion. This will cause the current potion to become a different potion using the mixing rules.

Press the non-center buttons in such a way to create the goal potion starting from the starting potion to disarm the module. After all 6 buttons have been pressed, the module will check if you have successfully created the goal potion. If not, the module will strike and will reset all input. Pressing the center button will also reset any input you have made.

Mixing Rules

Each potion has an RGB value according to its color. When mixed with a chemical, the RGB value of the potion is XORed with the colors of the chemical, with the BIG colors being 1 and SMALL colors being 0. The resulting RGB value is the new color of the potion.

RGB Table

Red	Green	Blue	Cyan	Magenta	Yellow	White	Black
(1, 0, 0)	(0, 1, 0)	(0, 0, 1)	(0, 1, 1)	(1, 0, 1)	(1, 1, 0)	(1, 1, 1)	(0, 0, 0)

The charge of the potion depends on the total amount of positives and negatives between the chemical it's mixed with as well as the potion itself:

- If the total number of positives is more than the total number of negatives, the potion becomes a positive potion.
- Otherwise, if the total number of negatives is greater than the total number of positives, the potion becomes a negative potion.
- Otherwise, the potion becomes a neutral potion.

Examples