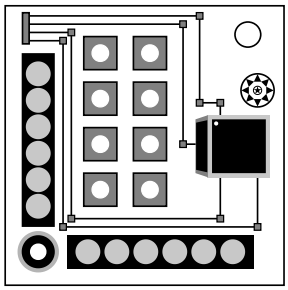
On the Subject of The Cube



The mothership has been contacted. They've sent an executive toy...

- A spinner above the cube lits a triangle indicator green for each of the eight stages to disarm.
- Disarm each stage by setting down a certain combo of square buttons and pushing the round button to submit.
- Redo the current stage after submitting a wrong combo.

Part 1: Find values from various module info

a. The cube has six faces, each with a digit from 0-9.
To the right is a net of the cube, with the order of face digits from 1 to 6, shown in their proper orientations.

• 1	← green			
2	3	4	5	
• 6	← red			

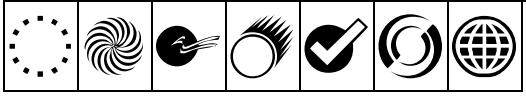
b. The wires extend from the starting hub at top-left, ordered by their positions there from top to bottom.

Red	(modules on bomb) + 7	**Orange**	(green square buttons) + 3
Green	(blue square buttons) + 7	**Purple**	sum of all digits on cube
Blue	(position of wire) + 5	**White**	= 6

c. The cube does six movements in order, then pause briefly and repeat.
Movements are observed from an aerial perspective upon the module.

	last digit in serial number		= 4
	first digit in serial number		= 7
	square buttons with the colour of 3rd wire		
	square buttons with the colour of 1st wire		

d. The left and bottom displays have eight symbols each, elongating in cycles.
Convert the symbols to digits from top to bottom, left to right.

1	2	3	4	5	6	7	8	9	0
									
									

All these values are used later in a calculation to obtain the desired combos.

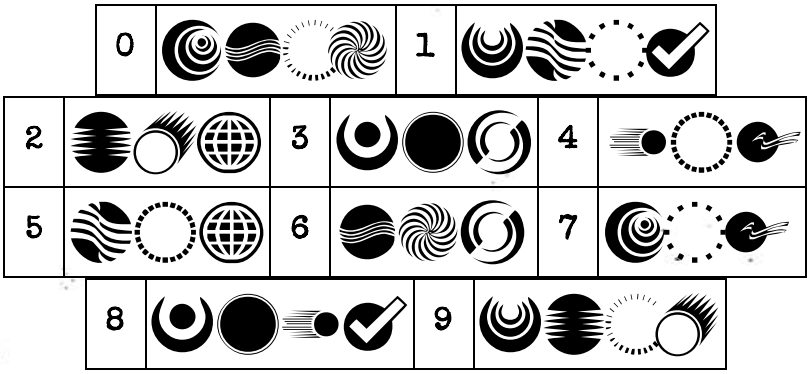
Part 2: Calculate key from previous values

1. Generate a number digit by digit from left to right:
   Digit 1 = (1st movement value + 6th face digit + 3rd wire value) modulo 10
   Digit 2 = (2nd movement value + 5th face digit + 4th wire value) modulo 10
   Digit 3 = (3rd movement value + 4th face digit + 1st wire value) modulo 10
   Digit 4 = (4th movement value + 3rd face digit + 2nd wire value) modulo 10
   Digit 5 = (5th movement value + 2nd face digit) modulo 8
   Digit 6 = (6th movement value + 1st face digit) modulo 9

2. Take the 6-digit number above and multiply it by 100.
   Add that with the converted left and bottom displays, but disregard any and all carry digits during this operation.
   The resulting 8-digit number is the key.

Part 3: Obtain desired combos of buttons from key

For each stage, use the digit of the key in the position matching current stage number, ordered from the left, to receive a group of symbols:



Only set down square buttons as follows before pushing the round button:

- Stage 1, 3 or 5: Set down all square buttons with a symbol in the group.
- Stage 2: Set down all square buttons either with a symbol in the group or with the same symbol as the round button.
- Stage 4: Set down all square buttons either with a symbol in the group or with the same colour as the round button.
- Stage 6: Set down all square buttons either with a symbol in the group or with the same colour as the 1st wire.
- Stage 7: Set down all square buttons either with a symbol in the group or with the same colour as the 3rd wire.
- Stage 8: Set down all square buttons WITHOUT a symbol in the group.

Be careful! The square buttons are unable to lift up until a combo is submitted.