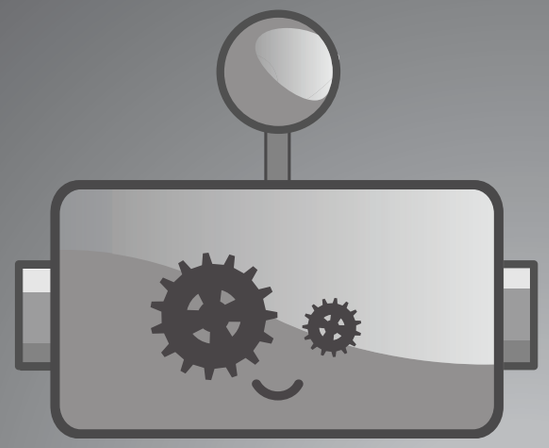


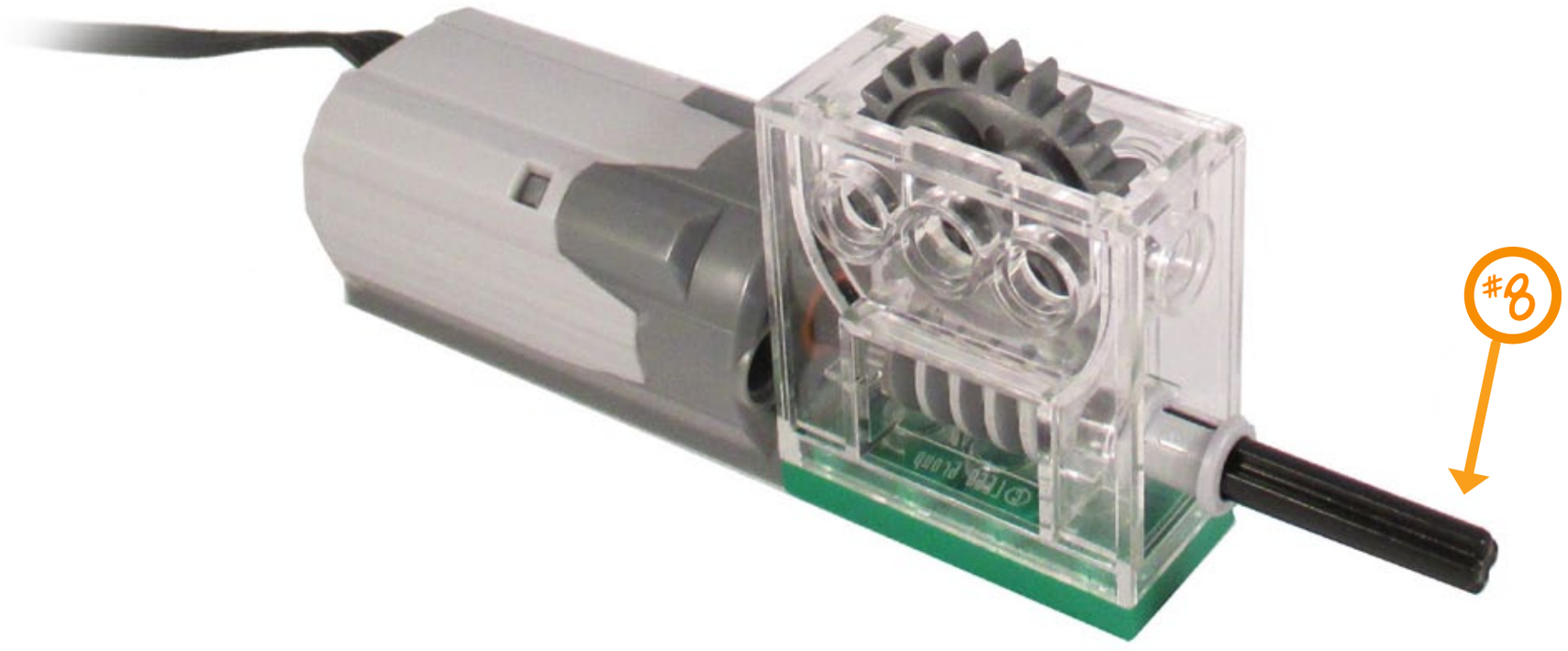
TINY TECHS CLUB

Creativity | Science | Technology

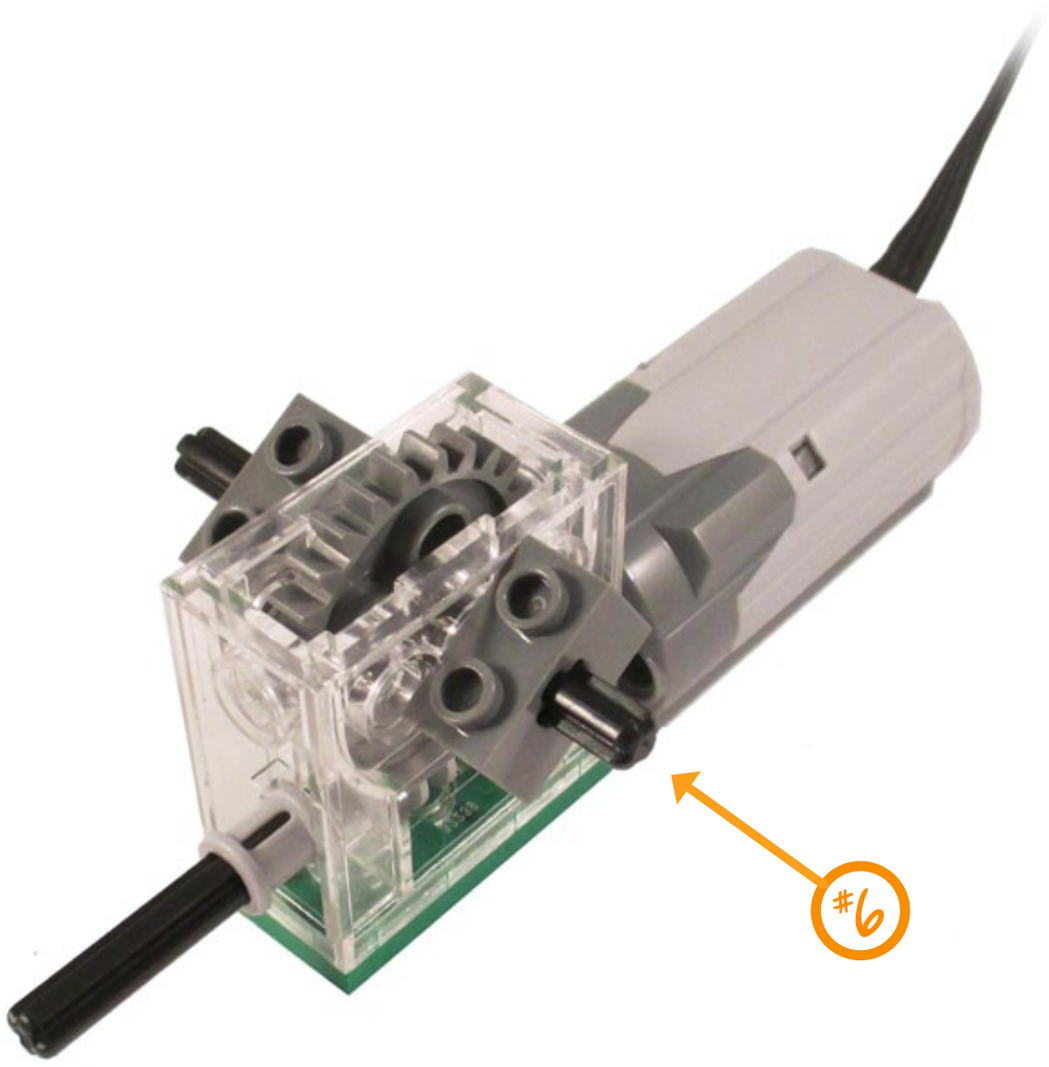
Magic Chest

ABRA CADABRA!! The Magic Chest opens with a tap of the wand. A tilt sensors on the wand activate the motor to turn the hinged lid.

Step 1

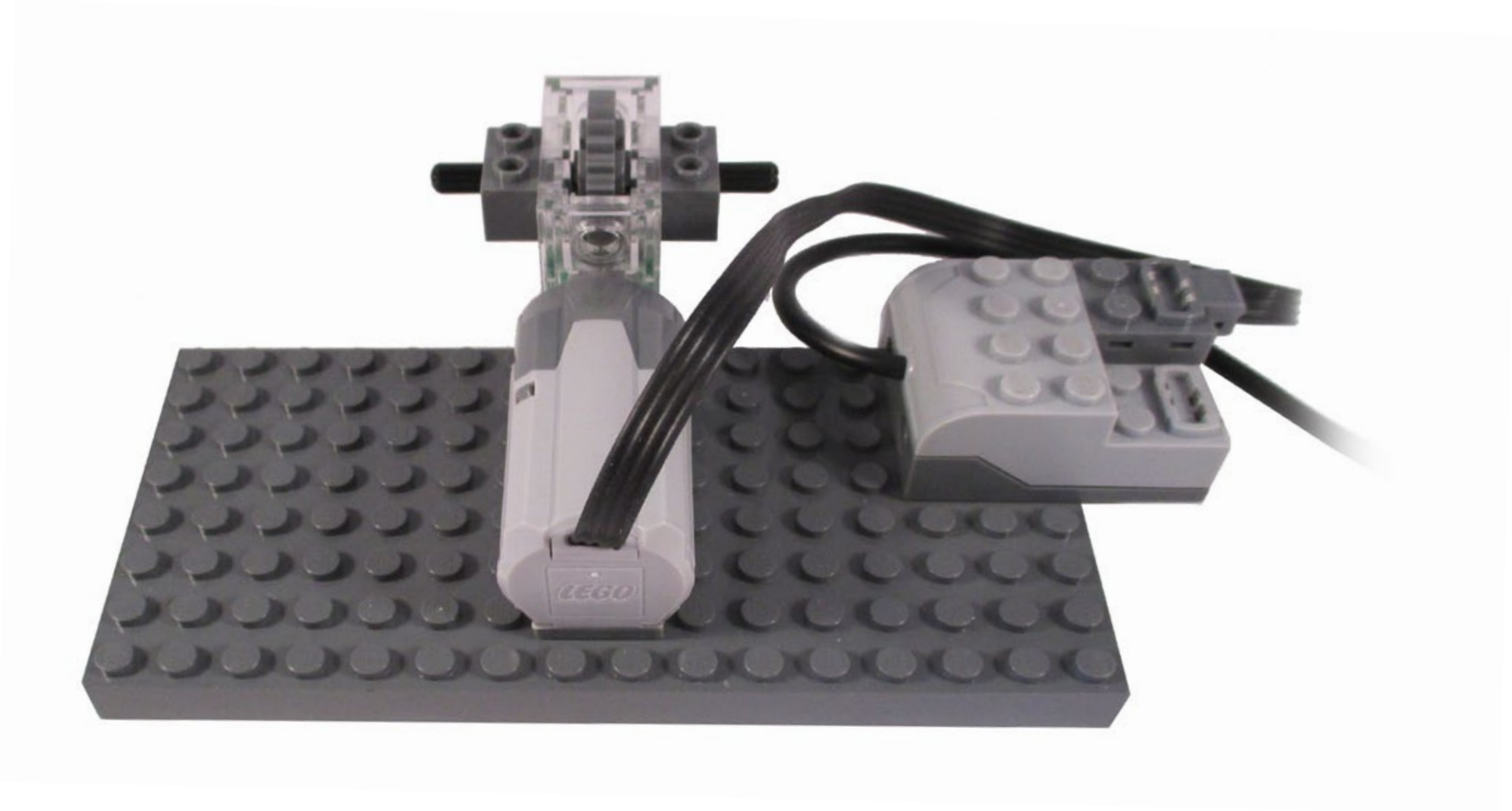


Step 2

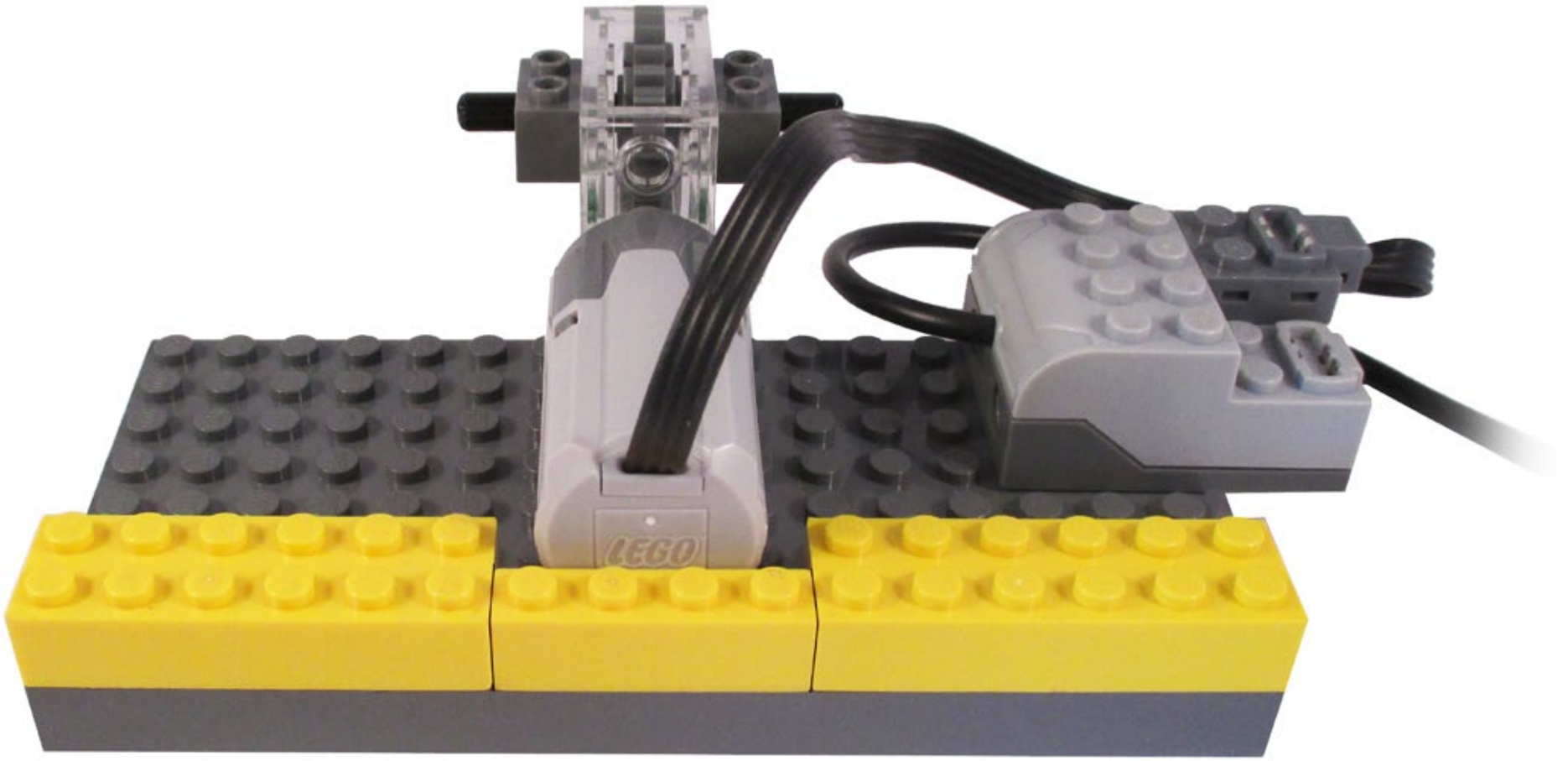


Step 3

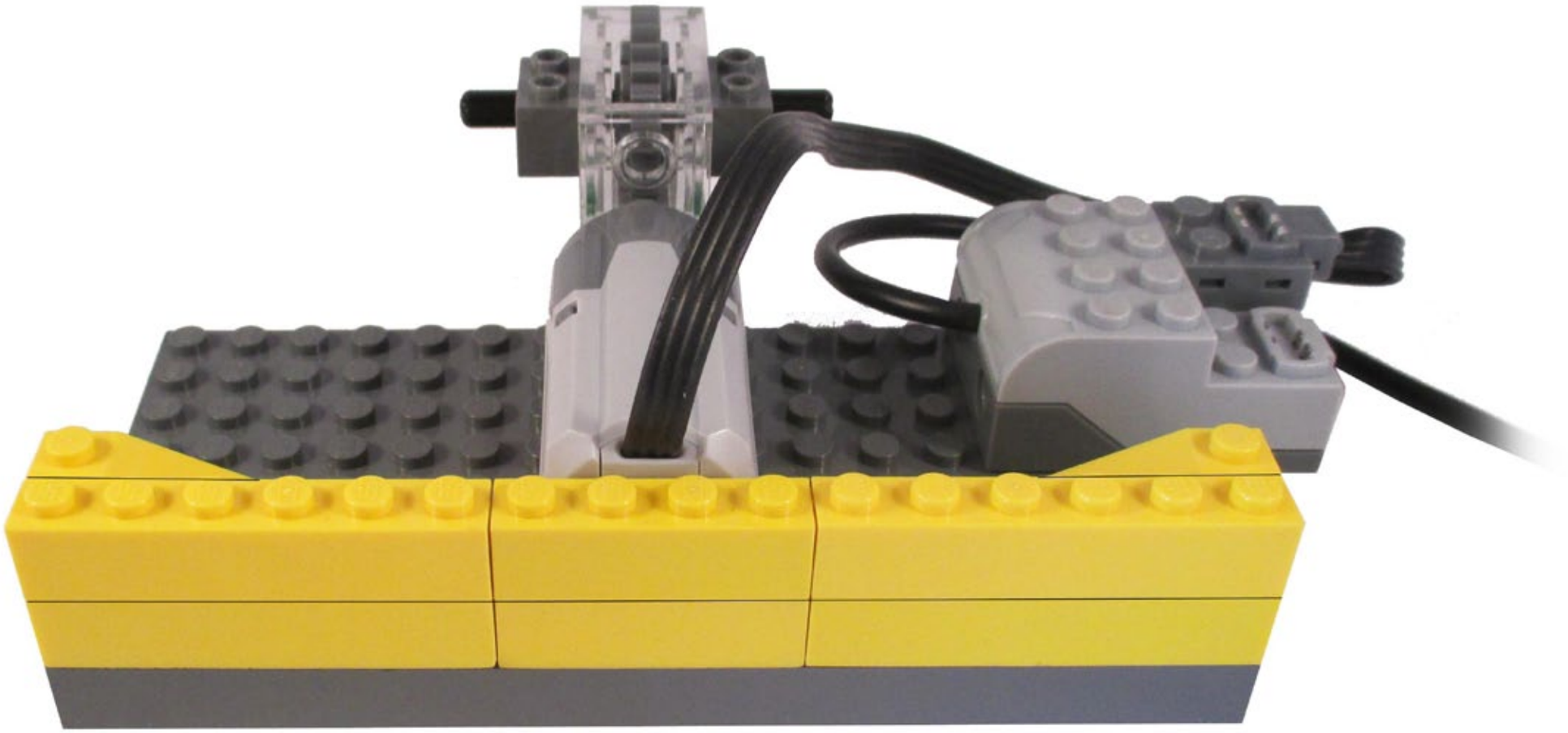
Plug in the Motor!



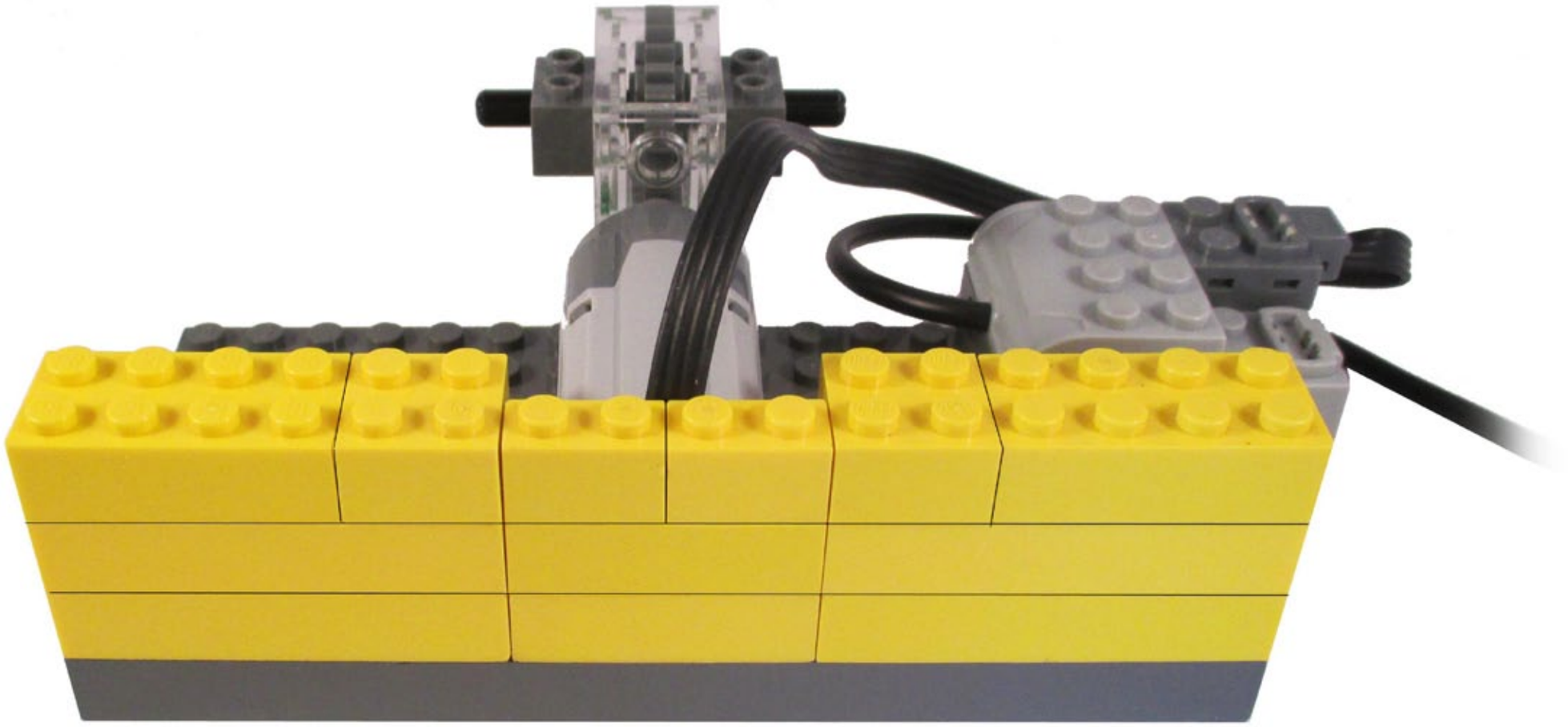
Step 4



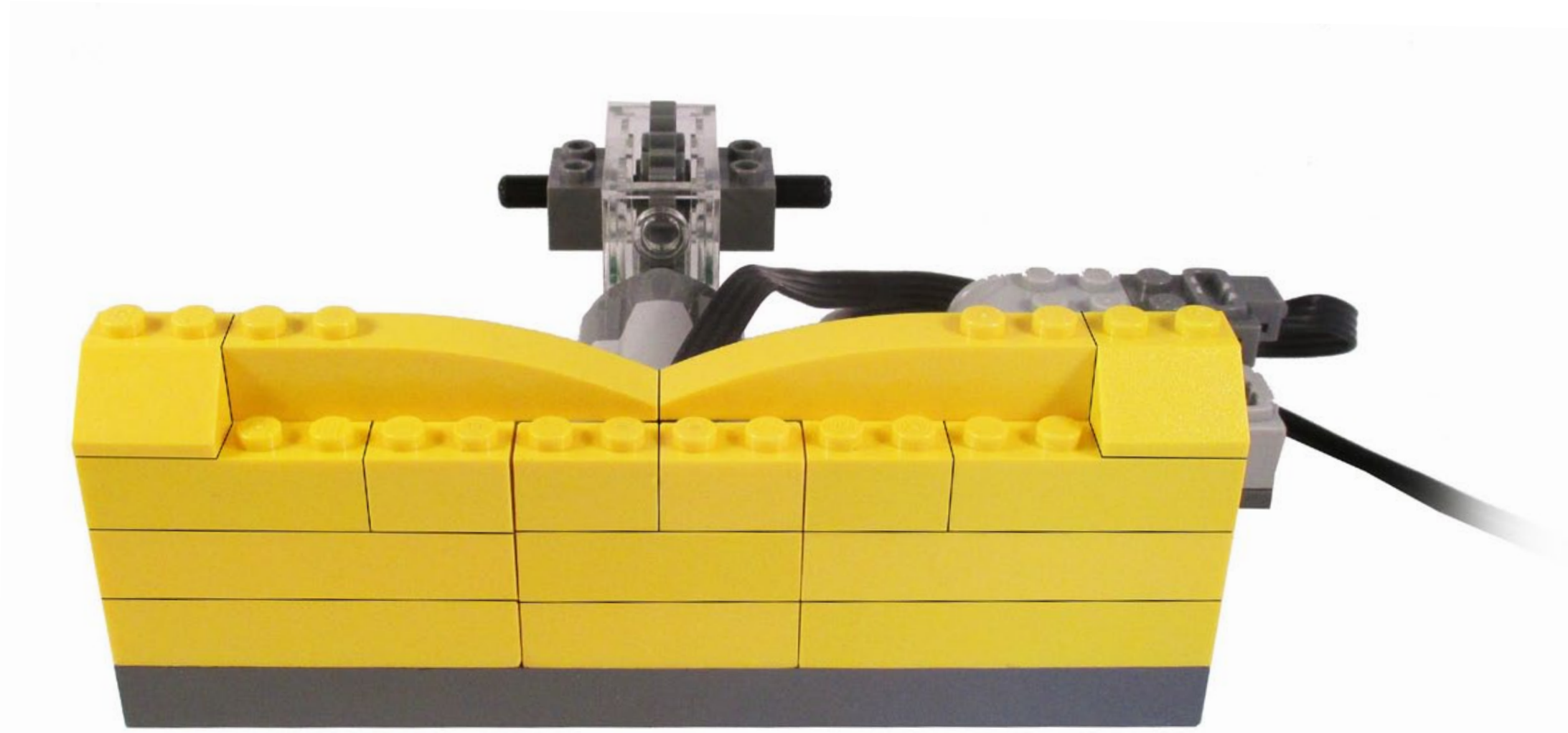
Step 5



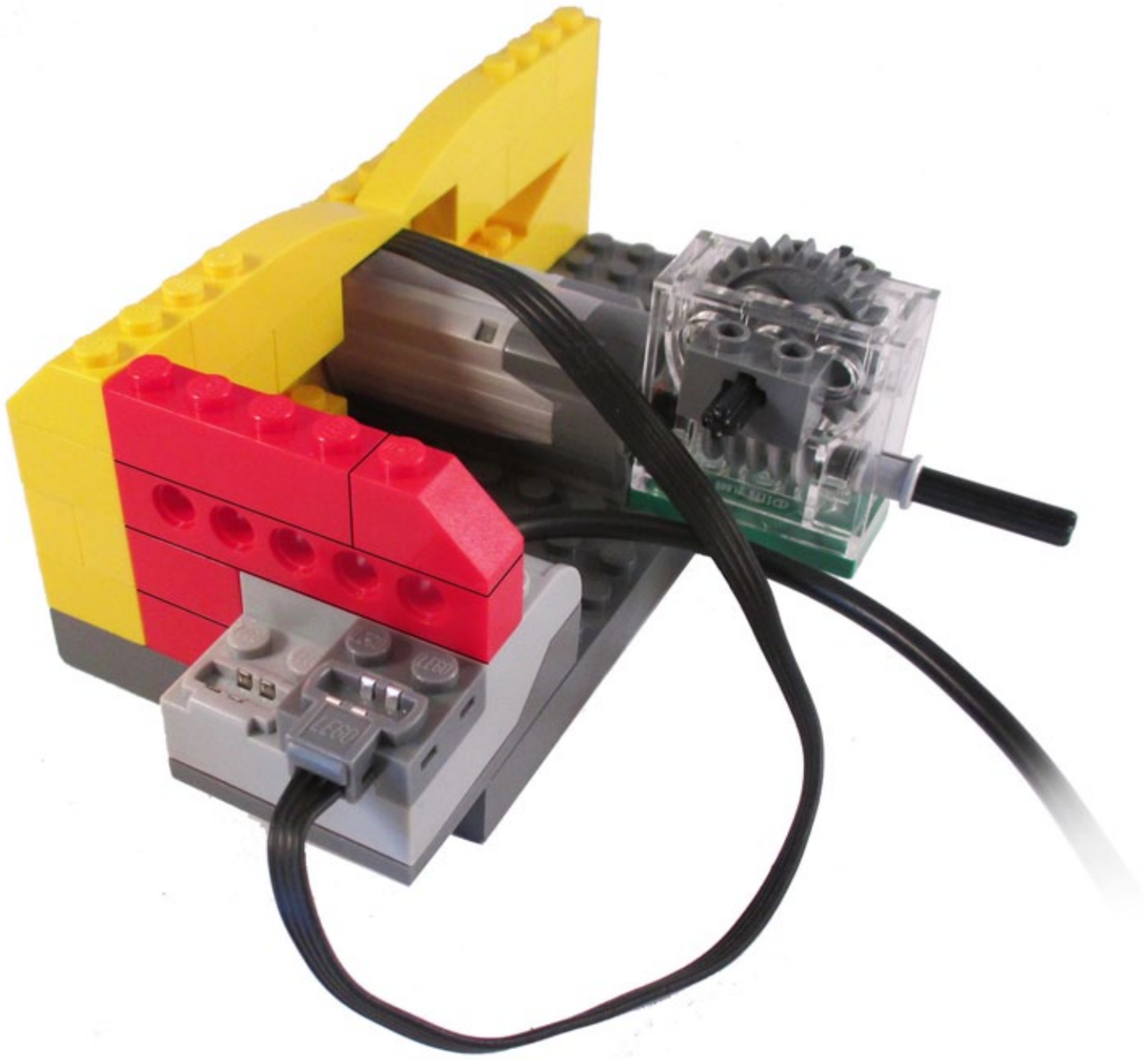
Step 6



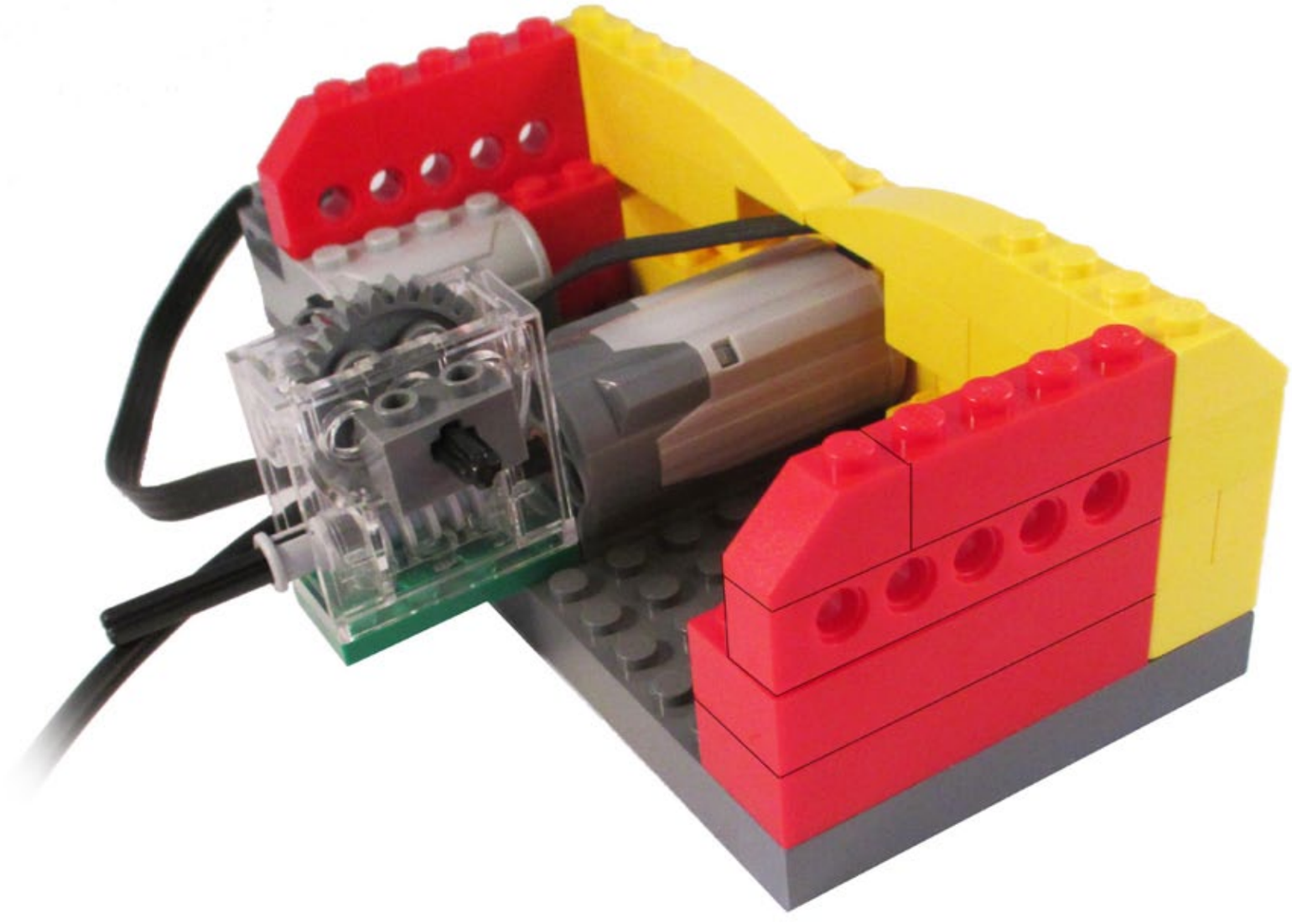
Step 7



Step 8



Step 9



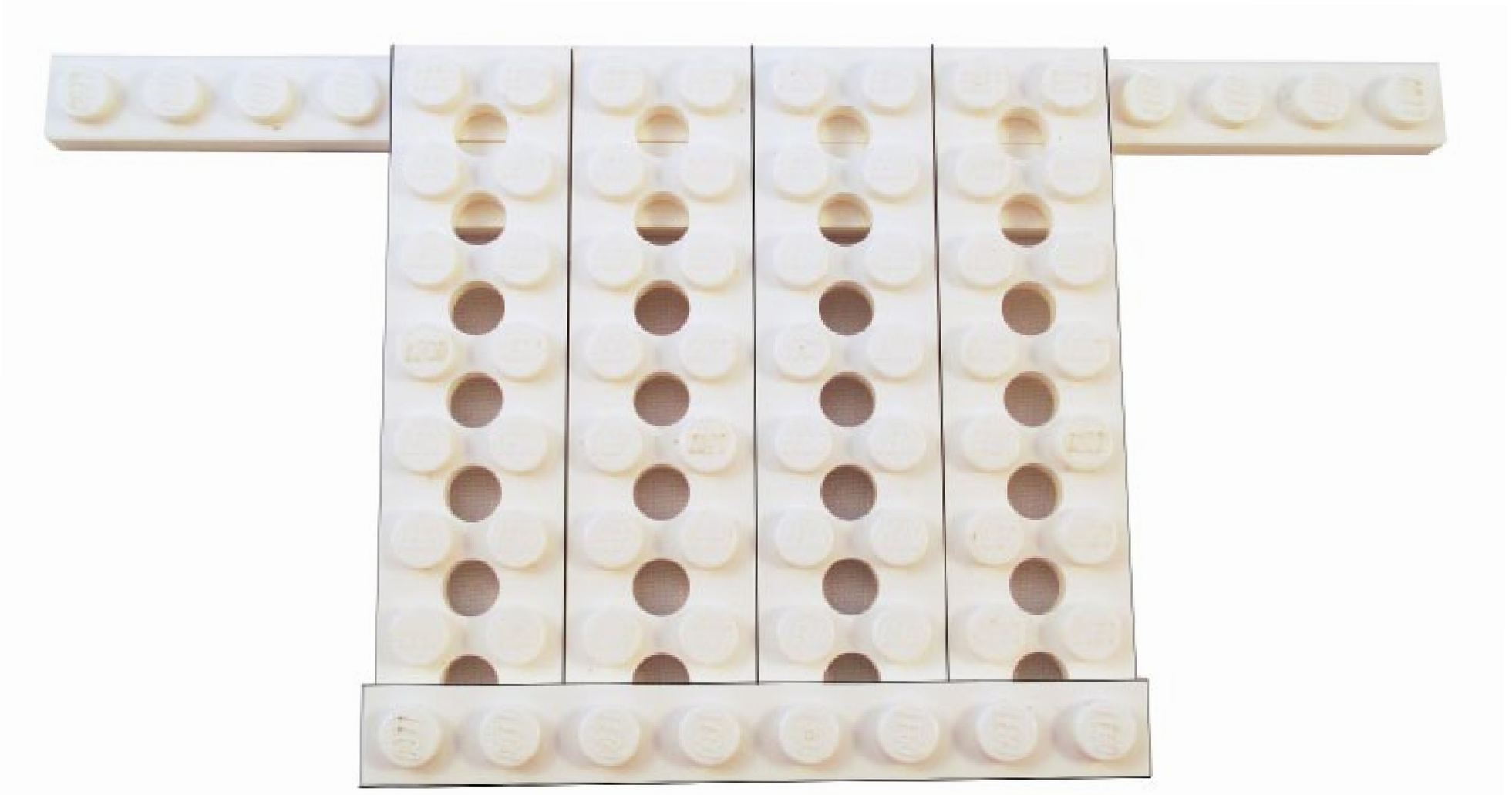
Step 10

You will Need:

White Plate 2x8 | White Plate 2x8 | White Plate 2x8 | White Plate 2x8

White Plate 1x8 | White Plate 1x8 | White Plate 1x8

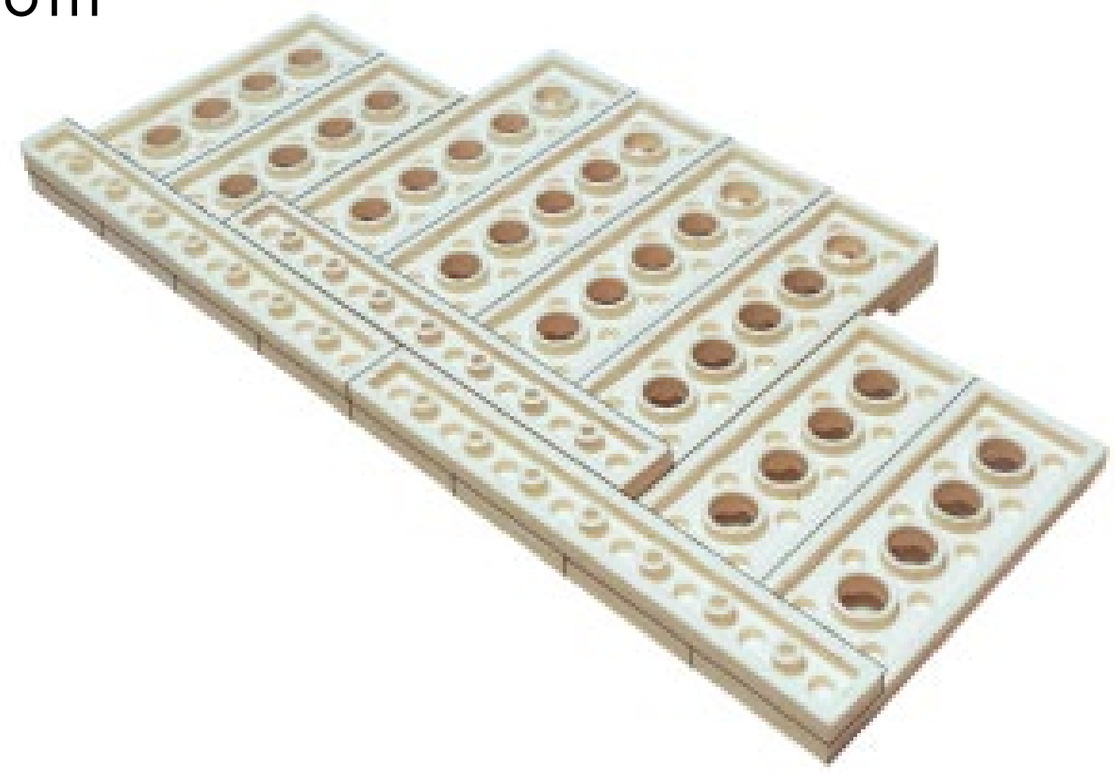
Step 11



Step 12

Top

Bottom



Step 13

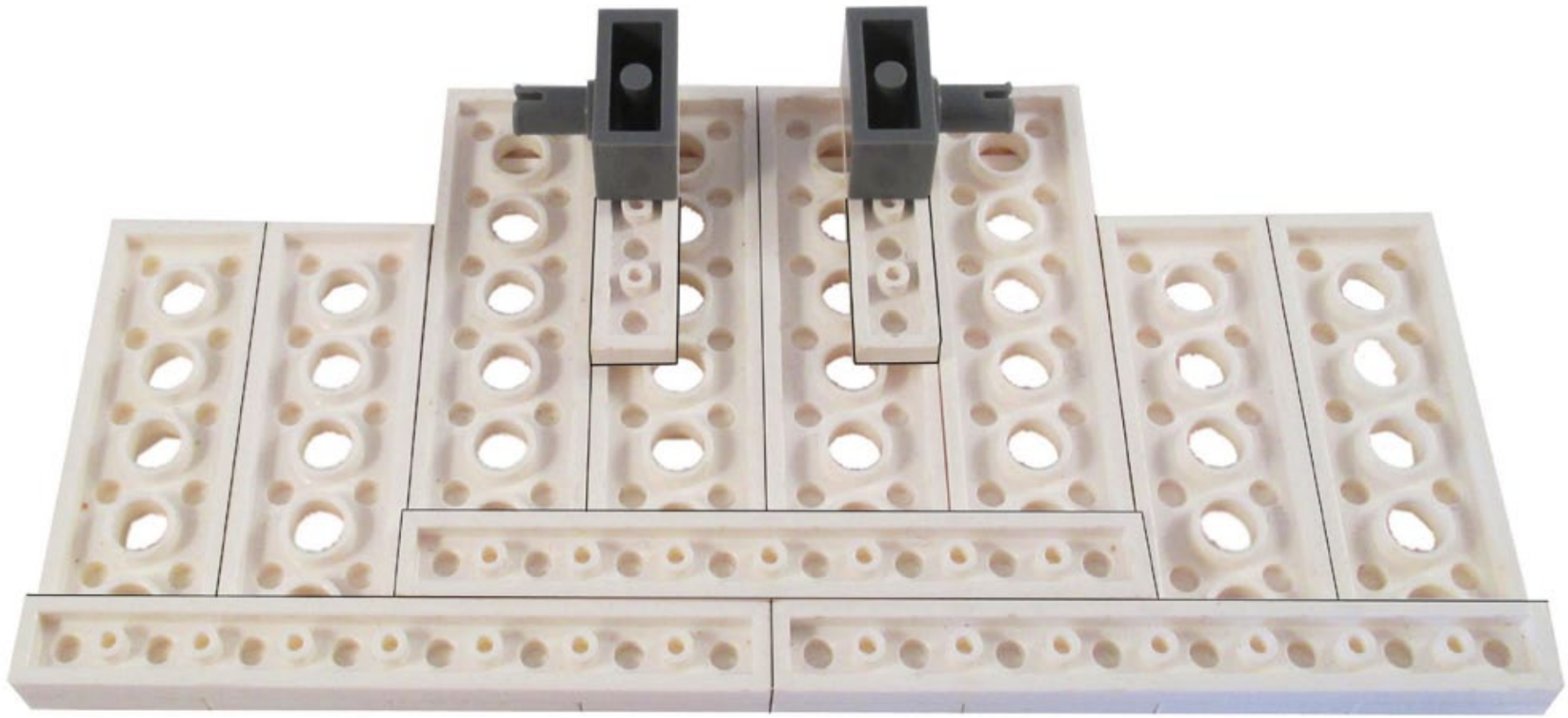
You will Need:

White Plate
1x4

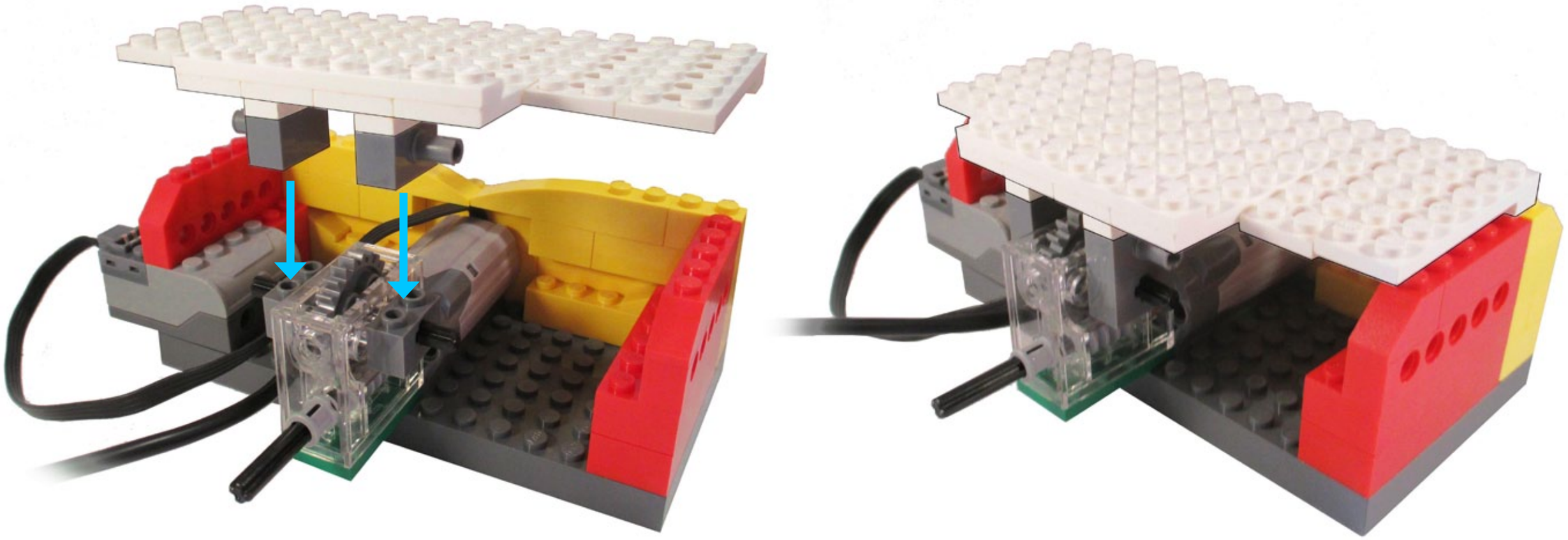
White Plate
1x4

Grey 1x2
with Peg

Grey 1x2
with Peg

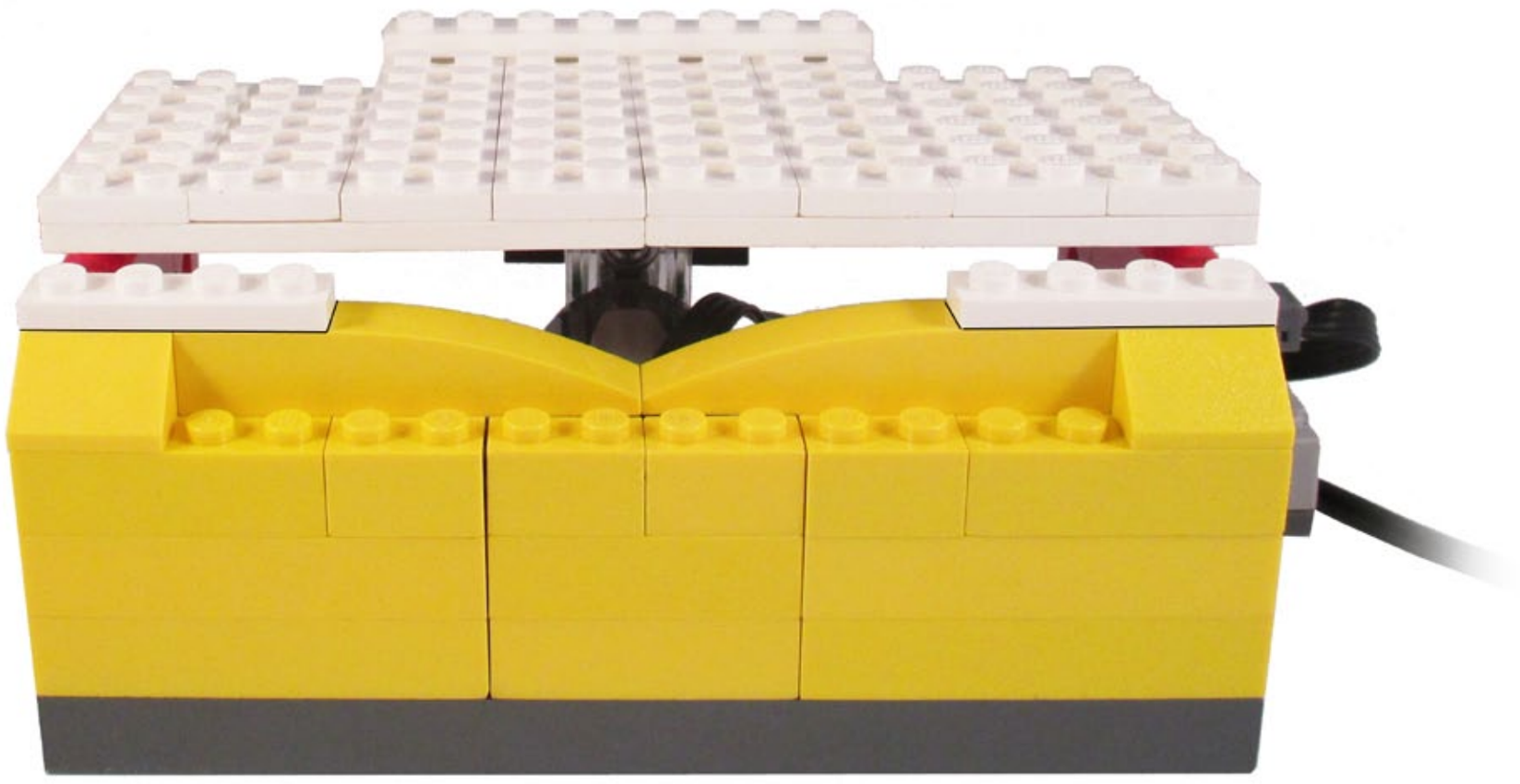


Step 14



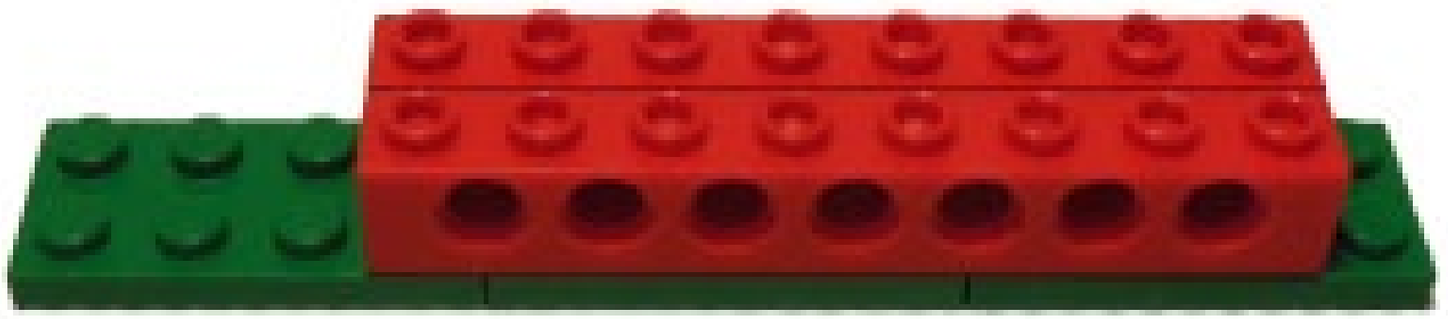
If your lid isn't in the down position, pull the axle out of the motor, but not out of the Screw Block, and turn it until the lid is down, then push it back into the motor. **Don't Snap the Plates down!**

Step 15



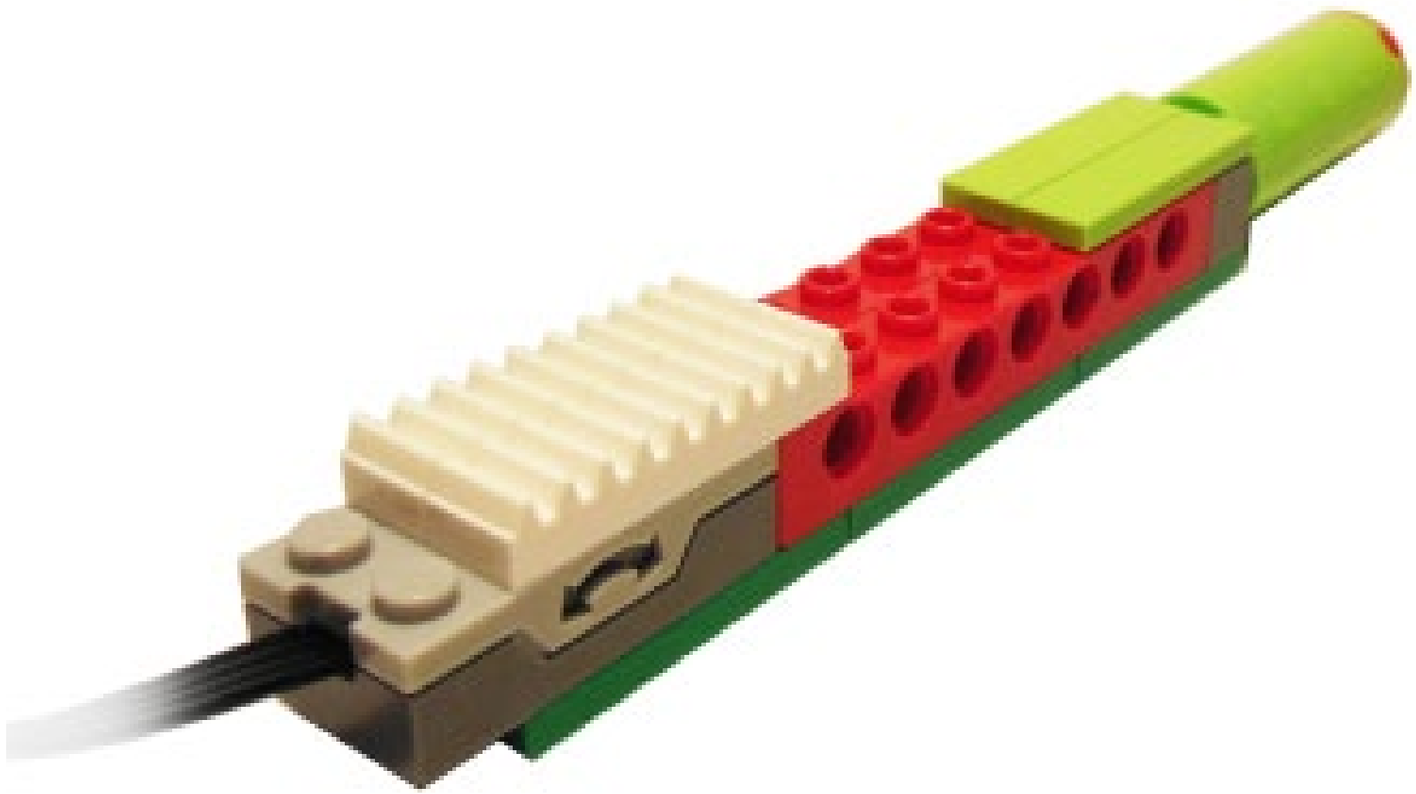
Step 16

Step 17

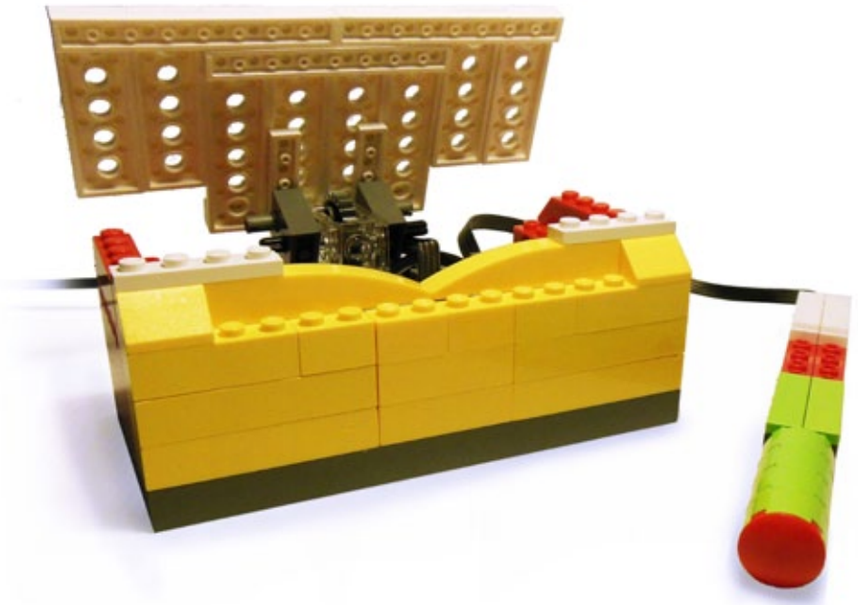


Step 18

Plug the Tilt Sensor into the Hub.



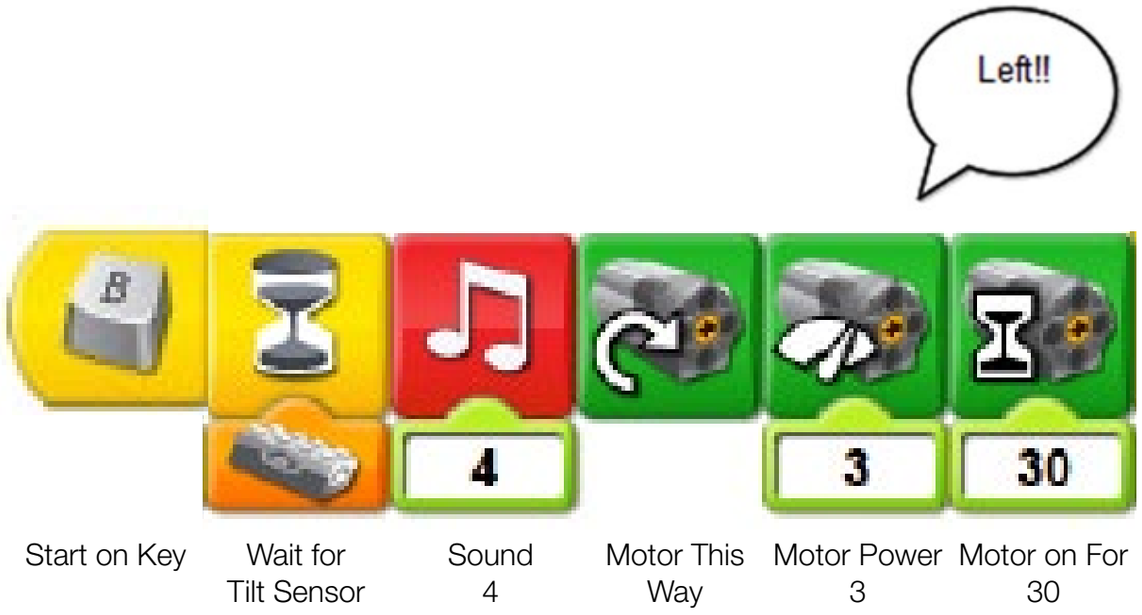
Your Magic Chest is Built!...
Time to Program it!



After Your Magic Chest is programmed tap it with the wand to open and close it!

Programming

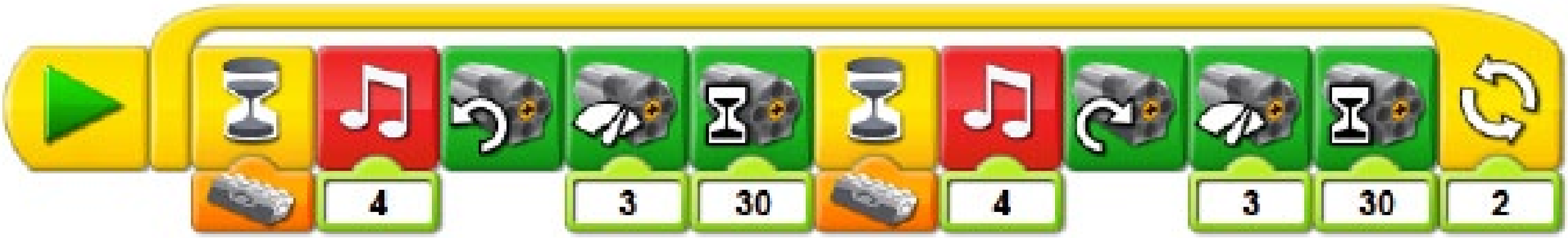
This program opens and closes the lid when the wand and **Tilt Sensor** are tilted down.



1. Minimize these instructions, but do not exit.
2. Open the WEDO software found on the desktop of your computer.
3. Program your robot with the program above.
4. If you finish, open the instructions again and continue to the extension activity!

Extension 1

This program combines opening and closing the lid into a single program using the repeat block.



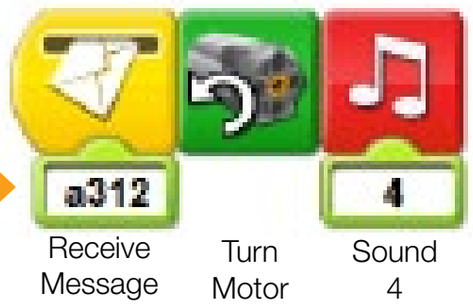
Secret Code Game

GUESS THE SECRET CODE!!

Player 1:

1. Secretly program your secret code.

Your Secret Code (Only 4 Characters. The first must be a letter)



Hide it from your partner underneath.

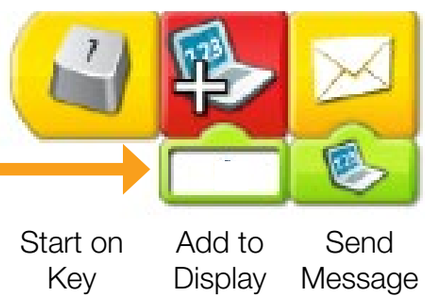
Display Tab

2. Make a program for the 1st letter of your code to show in the display tab.

Leave text blocks blank for Player 2 to guess.

3. Create another program for each number/letter in your code.

Leave text blocks blank for Player 2 to guess.



Secret Code Game

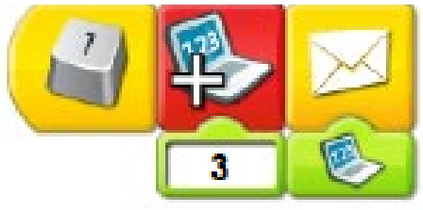
GUESS THE SECRET CODE!!

Player 2:

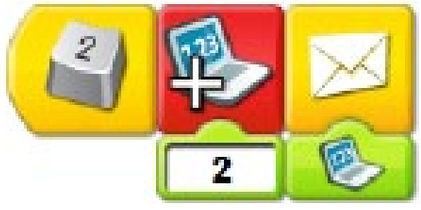
1. Guess Player 1's code by typing a number/letter into each program's text block.

Start Display

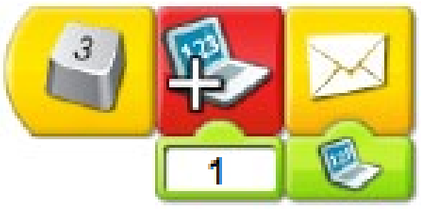
HINT! The first block will be a letter.



Start on Key | Add to Display | Send Message

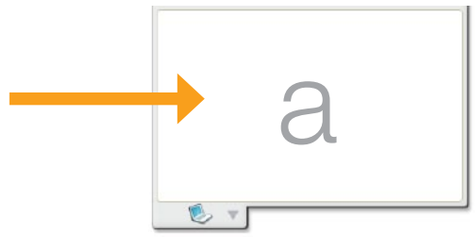


Start on Key | Add to Display | Send Message



Start on Key | Add to Display | Send Message

Your code displays here!

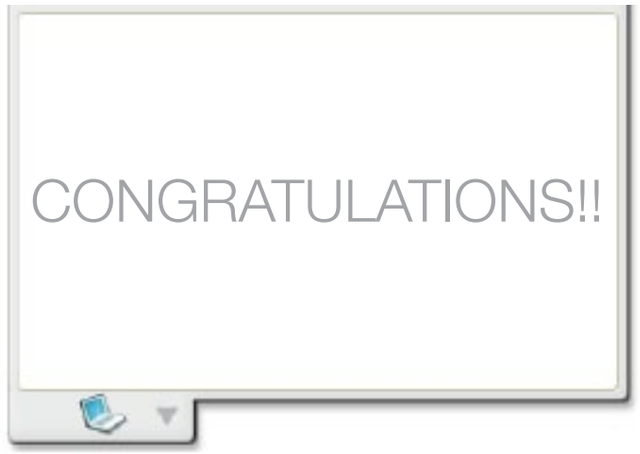


Display Tab

2. Press the play button and then press 1,2,3 quickly to activate each program. If you have guessed the secret code, The Magic Chest will open!!

Extension 3

Can you make an additional program that will display a “CONGRATULATIONS” message when the secret code is guessed and the Magic Chest opens?



Display Tab