



# **RoboChef**

Everyone could use a hand with food preparation. Create a robot that helps you cook. It can do a single task, such as stirring a pot, or a complex operation, such as making a sandwich.



## Think Like an Engineer:

How can you make your robot as user-friendly as possible?



What foods are the most difficult to make? What tools will help you make them?



## **Example Ideas**









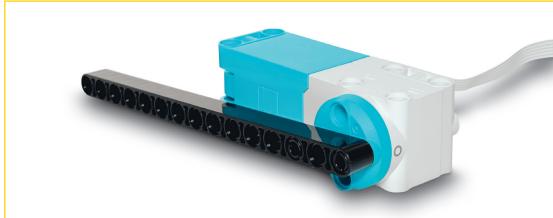




#### **Build It!**

You can add a long LEGO piece to increase the radius of the motor's rotation.





#### Code It!

Code for the Sandwich Maker:

```
6 hub.light_matrix.write('Press Button')
 7 count = 0
 8 while True:
       if button.is pressed():
           count += 1
10
11
          if (count % 2)==0:
              motorA.run_for_degrees(150)
12
13
              wait_for_seconds(3)
              motorA.run_for_degrees(-150)
14
15
          if (count % 2) != 0:
16
               motorB.run_for_degrees(-150)
17
               wait_for_seconds(3)
18
               motorB.run_for_degrees(150)
```

#### Modify It:

How could you change the settings depending on the food you're putting on the sandwich? What other tools could you use this code for?

Can you try to incorporate other sensors in your code/build?



# **Challenge Yourself!**

Can you make a robot that does more than one task in the kitchen?

