

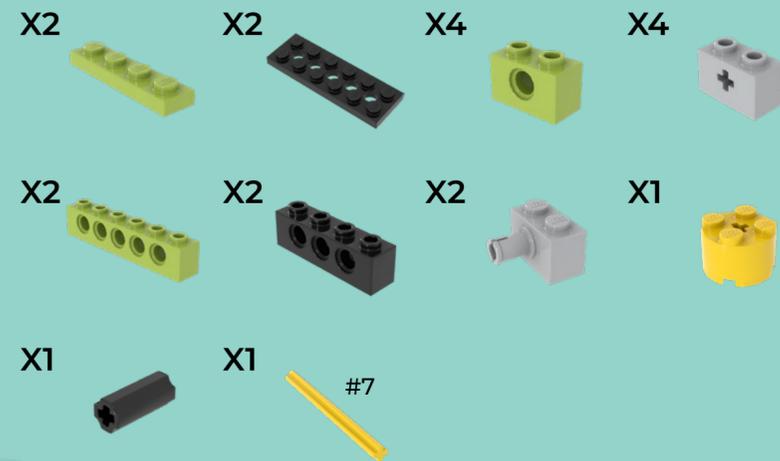
Start  
Building!

# Power Drill



# Power Drill

## Parts In This Build



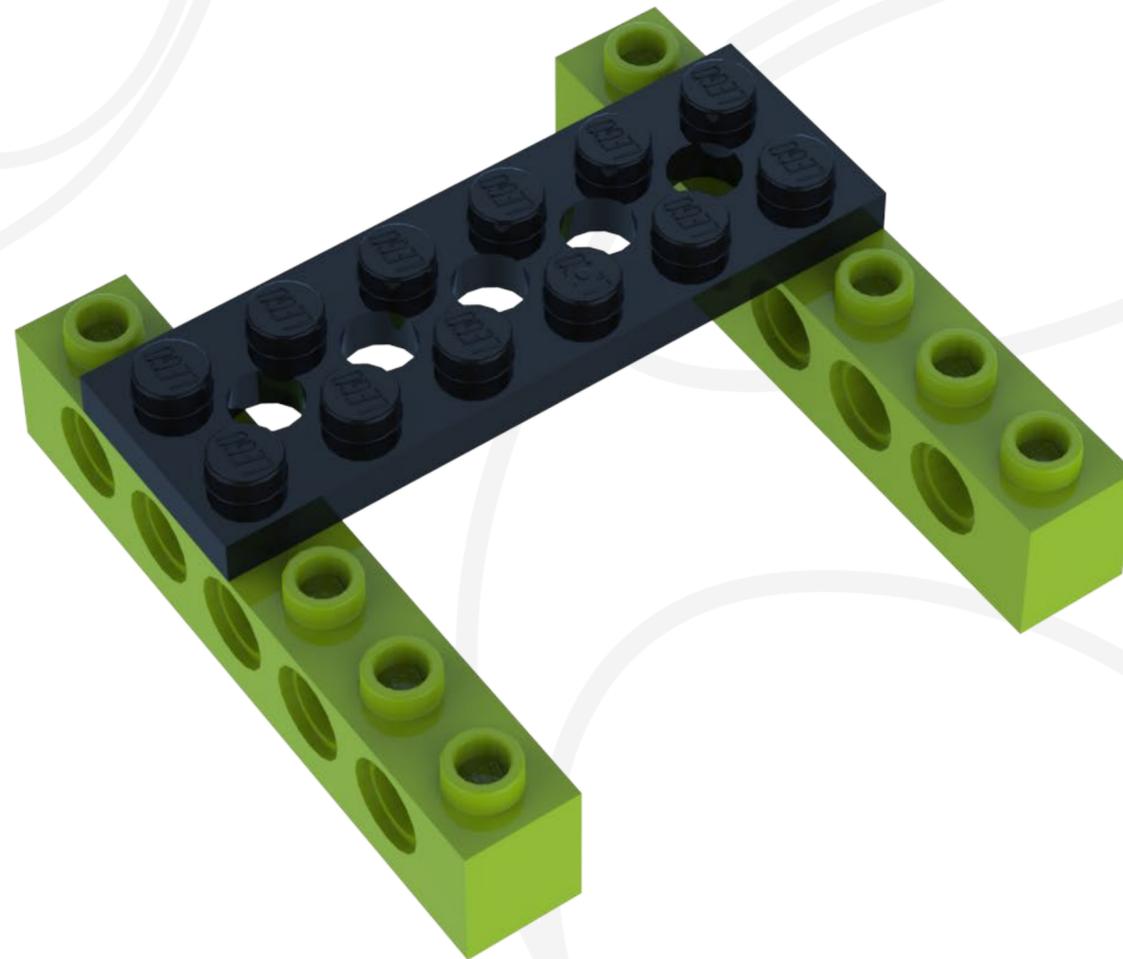
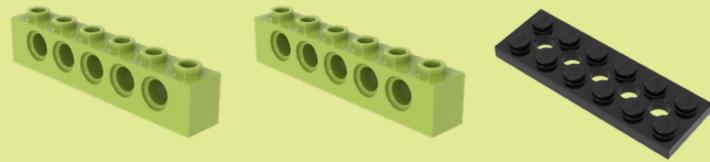
**Description:** Learn how an electric motor changes electrical energy into mechanical movement to power the drill. Observe the rotational motion of the Axle and experiment with motor direction.

**ViNee Set:** Essential

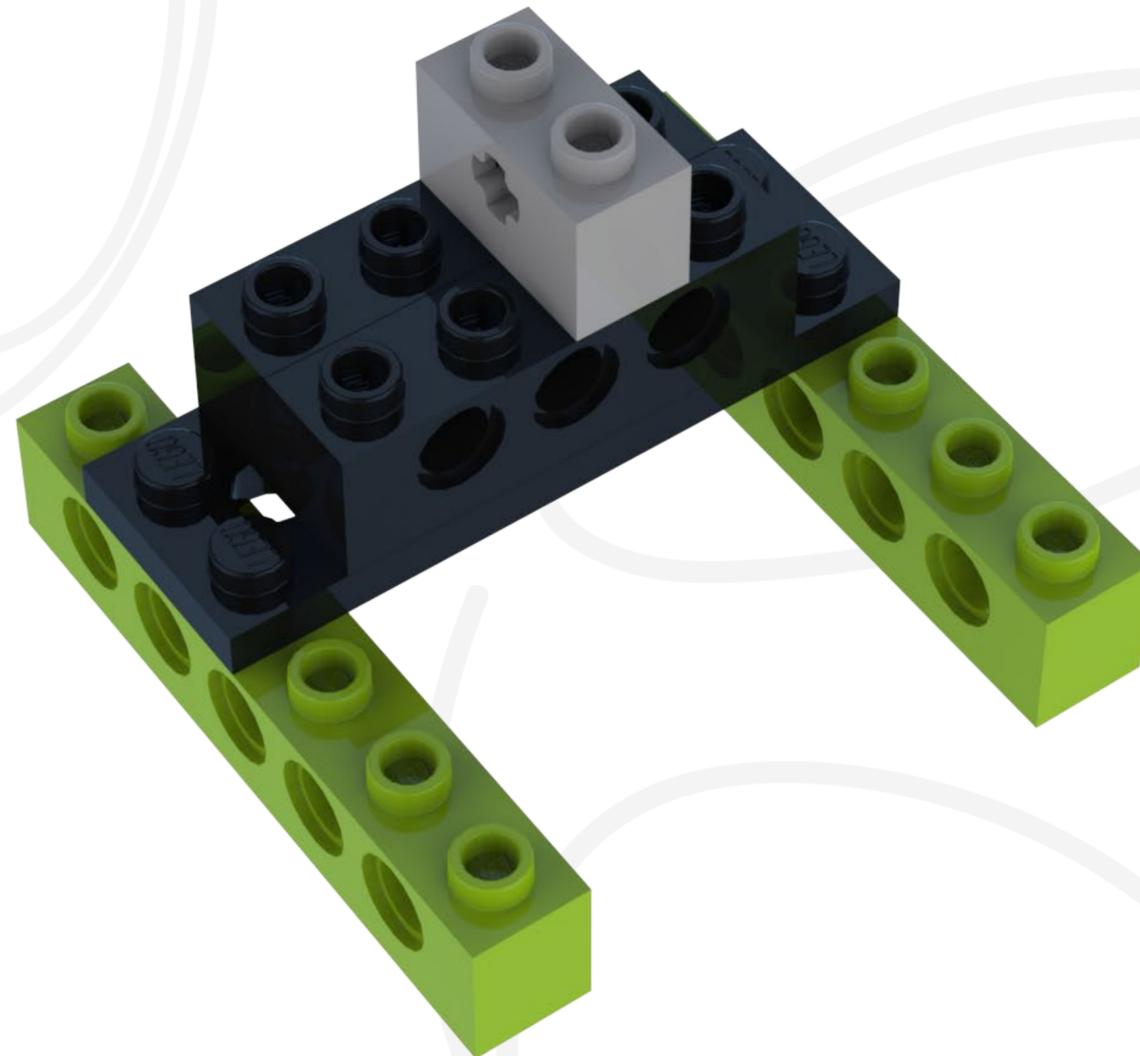
- Learn:**
- Motor Power
  - Motor Direction
  - Axles



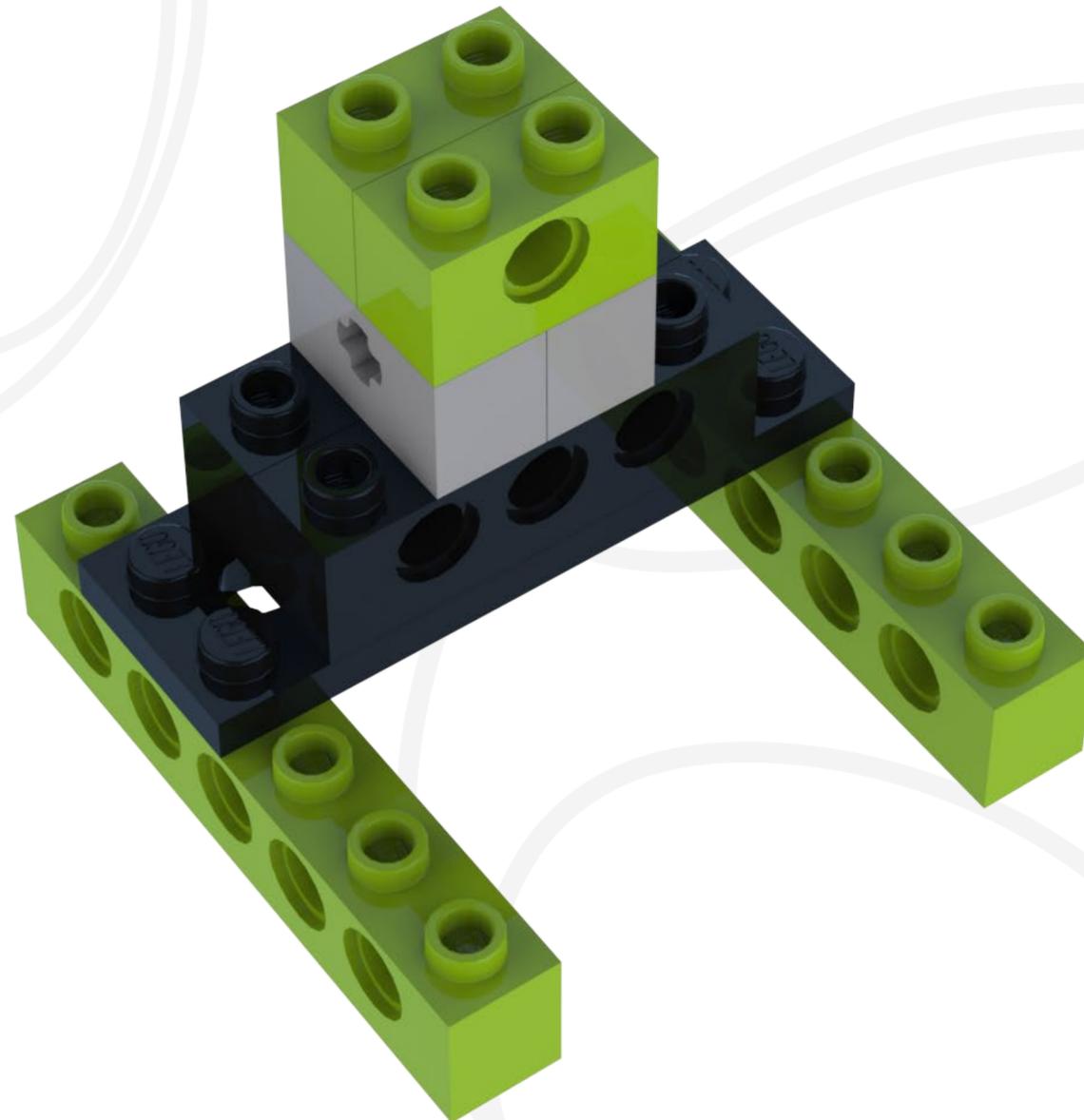
1



2



3



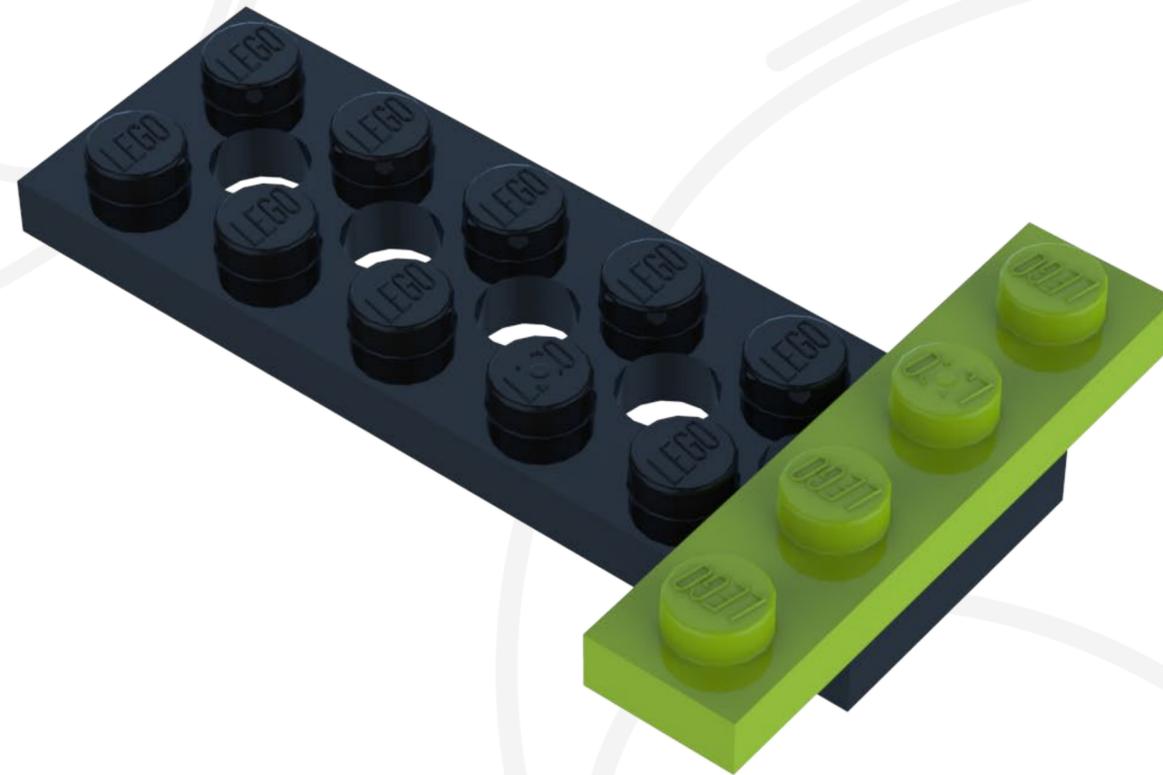
4



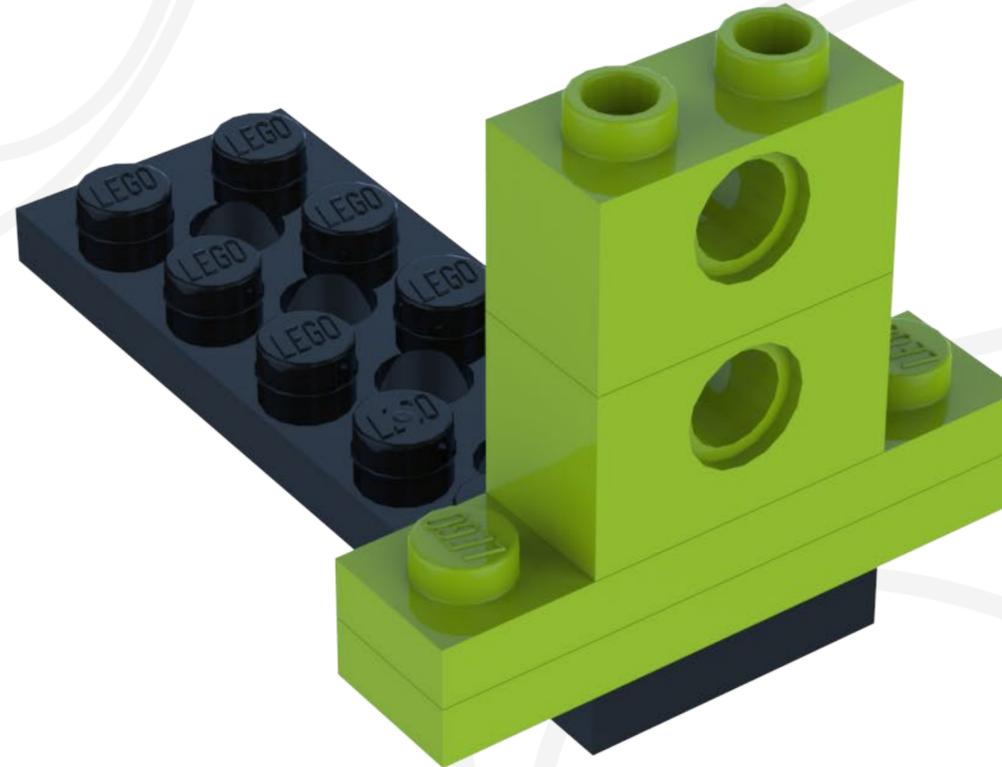
5



New Assembly



6









10



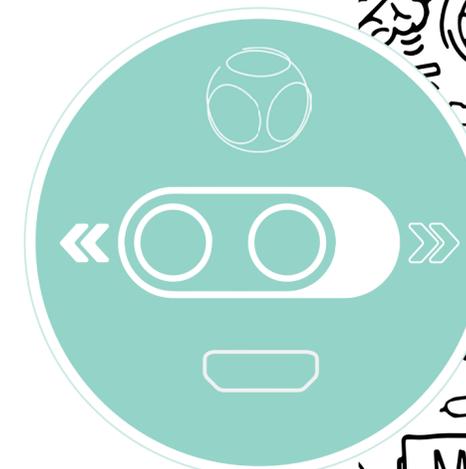
Attach!



# ! Finished



Make sure your robot is correct before turning it on.



Learn 

# Learn

## Motor Power

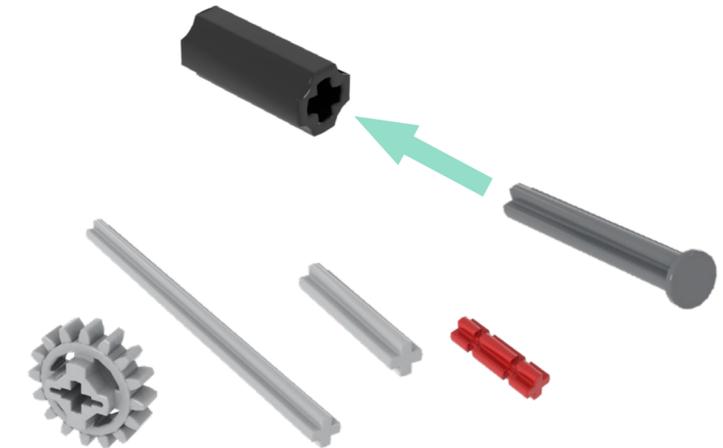
An electric motor changes electrical energy into mechanical movement.

## Motor Direction

The switch can change the motor rotation clockwise and counterclockwise!

## Axle

Axles are rods that attach to the motor. The motor makes them rotate. Anything you attach to the axle will rotate too!



# Task

1. Identify the axle. How is it moving?
2. Move the switch to reverse the direction of the motor. What changed?
3. Can you add part to the end of the drill to create a "drill bit"?
4. Try using remaining axles as pretend screws.

# You are learning!

