

U2-2.5b Challenge up: Spinning solar system

Edison's **two motors** each control a powered socket, one on the right side of the robot and one on the left. When you want the robot to drive, you attach wheels to the powered sockets using the wheels' **axles**. The motors turn the axles, which turns the wheels and allows Edison to drive.

How else can the powered sockets be used?

If you turn an Edison robot on its side, you won't be able to drive it like a car. Instead, you can use the robot to be the powered base for an invention!

What could you attach into the powered socket instead of a wheel? What will happen when the motor is turned on?



Don't forget

The wheels of your Edison robot can be removed from the powered sockets they sit in. **These sockets are what Edison's motors actually move.**

What to do

In this project, you need to use your Edison robots to help create a model of the solar system where the planets can spin. Work in a group to build your model. Decide how you will build the planets, if you will include moons, how big each solar object will be and how fast each one will spin. How accurate to the real solar system can you make your model?

You can take the wheels off of the robots and use a different axle inside the powered socket or build using a wheel as a base.

Each robot will need to be programmed using EdScratch. Write and test your programs for each robot. You may need to make adjustments to your program depending on the size of each object and how you attach that object to the powered sockets of each robot.



Hint!

The **set right motor** and **set left motor** blocks are very helpful if you only want **one motor to move**. **Don't forget** you need another block, like a **wait** block, in the program to set the duration for the **set motor** blocks.

