

Changing the Wheels

In this Lesson: There are three types of wheels available to use on your BaseBot. Learn about each type and how to change them on your BaseBot prior to experimenting with different wheel combinations.

Definition(s):

- **Travel Tire:** Hard rubber tires with treads that are thinner than the other tires
- **Balloon Tire:** Tires made of soft and flexible rubber. These tires are smooth and wider than Travel Tires.
- **Omni Directional Wheel:** Wheels that have rollers around the circumference of the wheel. These wheels are good for turning and for side-to-side motion.

Notes:

- You may want to use Travel Tires on a drivetrain where you need your robot to drive straight
- The soft and flexible nature of the Balloon Tires allows them to work well for intake mechanisms
- You can also use Balloon tires on a drivetrain, although the soft nature of these tires can cause them to be less accurate when driving in autonomous mode
- You can use Omni wheels on drivetrain axles when you want to turn easily

How to Change the Wheels on your BaseBot:

1. Add the 2x2 Center Offset Round Lock Beam (Hubcap) to the tire with four pins.
2. Slide the wheel onto the shaft (the hubcap holds the wheels onto the shaft).

Pro Tip #1: Hold down the end of the shaft as you slide the wheels on - this will help you slide the wheel down the shaft as much as possible

Pro Tip #2: Keep the 2x2 Center Offset Round Lock Beam (Hubcap) on your wheels throughout the STEM Lab Unit so you can change the wheels quickly and easily