

Conceptual

You have a robot chassis kit.

- Familiarize yourself with the directions
- Can you tell the difference between metric and imperial screws and nuts?

Basic Make

- Make the robot chassis
 - Position Arduino microcontroller using Velcro or zip-ties to the rear
 - Position breadboard toward the front

Advanced/Extended Make

- Determine mounting points for limit switches to act as “whiskers”
- Design a better battery mounting to allow batteries to be changed more easily.

Equipment

- Chassis components: Robot Chassis Kit
- Various tools as needed

Objective

Physics Concepts

- Engineering Design Process
- Problem solving

Experimental analysis

- Trial and error

Technology Concepts

- Directions
- Construction techniques