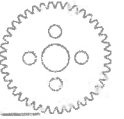


# Activity 4 – Get a Grip



## Vocabulary

- degrees of freedom
- horizontal
- vertical
- work envelope

## Materials

- TETRIX PRIME Starter Set
- “Get a Grip Data Sheet”
- Tape measure

## Objective

Learn how to operate a gripper tool to harvest objects.

## Procedure

1. Assemble the Pickee Bot from the instructions included in the *Builder’s Guide*.
2. Explore the work envelope of the Pickee Bot.
3. Use a tape measure to carefully measure the distance from the base of the robot to the highest point it can reach. Record this information on the “Get a Grip Data Sheet.”
4. Use a tape measure to carefully measure the distance from the center of the robot base to the farthest point to the left and right the robot is able to reach. Have students record this information on the “Get a Grip Data Sheet.”
5. Arrange cups within the gripper’s work envelope. Place a ball in one of the cups and move this “hazardous material” to another one of the cups.
6. Complete the “Get a Grip Data Sheet.”
7. Disassemble the robot and return the TETRIX PRIME parts to the storage container.

