

# Assignment 5.3.1: Possible Arm Designs

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In your notebook, draw and describe 2 possible designs to that will satisfy the following design requirements:

- Materials are low cost (less than \$10 total) and available at a hardware or fabric store. See “parts list.xlsx” for material costs for things that we have in the lab. If you supply materials from home, you must account for their cost.
- Must be able to:
  1. Open a water bottle, take a drink from the bottle, and put the bottle down. (You may use the other hand to assist in opening, but not drinking from the bottle.)
  2. Throw a tennis ball to hit a 2 ft. target from a distance of 10 feet away.
- Must be body powered (no electronics, motors, etc.). You may use the other hand to activate a feature, but not while actually throwing the ball, opening the bottle or drinking.

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Developed through a partnership between the University of Utah College of Engineering and Granite School District