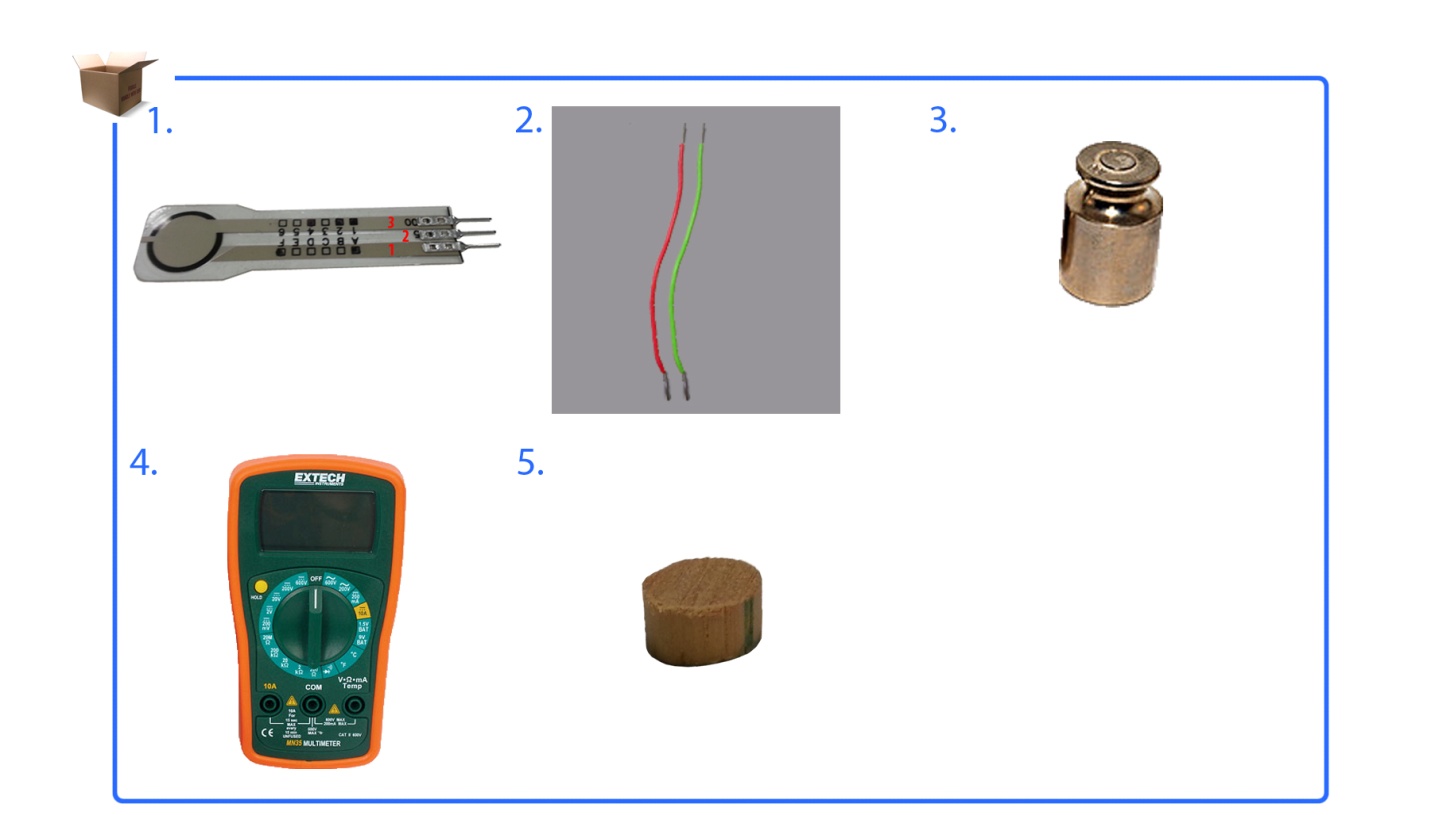
**Calibrating the Force Sensor: Determining Relationships between Applied Force and Sensor Resistance/Conductance INSTRUCTIONS**

**Use this instruction manual to help you connect the force sensor to the multimeter. Place a wooden puck and weights on top of the sensor to obtain a sensor reading. The goal is to determine the relationships between the applied force and sensor output. Make sure you have the following items:**



**FlexiForce sensor**

**two 6-inch wires (22 gauge)**

**weight set**

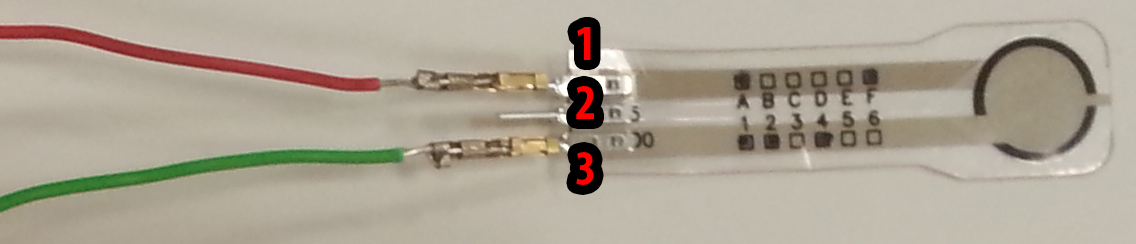
**wood puck**

**multimeter**

**NOTE: Record all calibration data on the *Calibrating the Force Sensor Data Collection Sheet*.**

**Instructions**

1. **FlexiForce Sensor Pins**



**Figure 1**

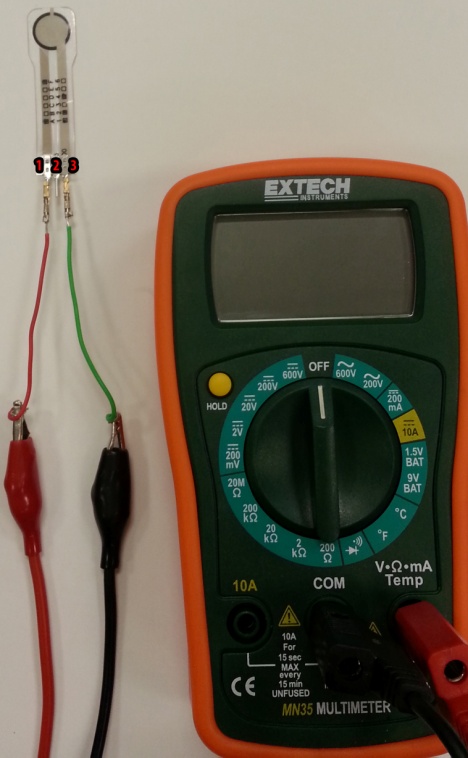
* 1. The middle pin is non-active.
  2. Connect wires at FlexiForce sensor pin 1 and pin 3.

Make sure that pin 1 DOES NOT TOUCH pin 3.

* 1. To do this, use tape, solder or a pin connector.

1. **Breadboard Connection**
   1. Connect sensor pin 3 to ground (black) on the multimeter.
   2. Connect sensor pin 1 to resistance (red) on the multimeter.
   3. Set your multimeter to 20M ohms.





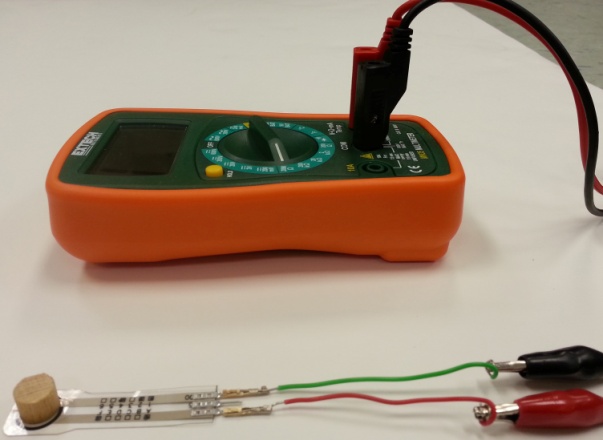
**Figure 2A-B**

**Figure 2C**

1. **Puck**

Place a wooden puck on the center of your sensor.

* A puck is an object that has the same diameter as your sensing area.
* A puck is used when the force area being applied is greater than your sensing area.

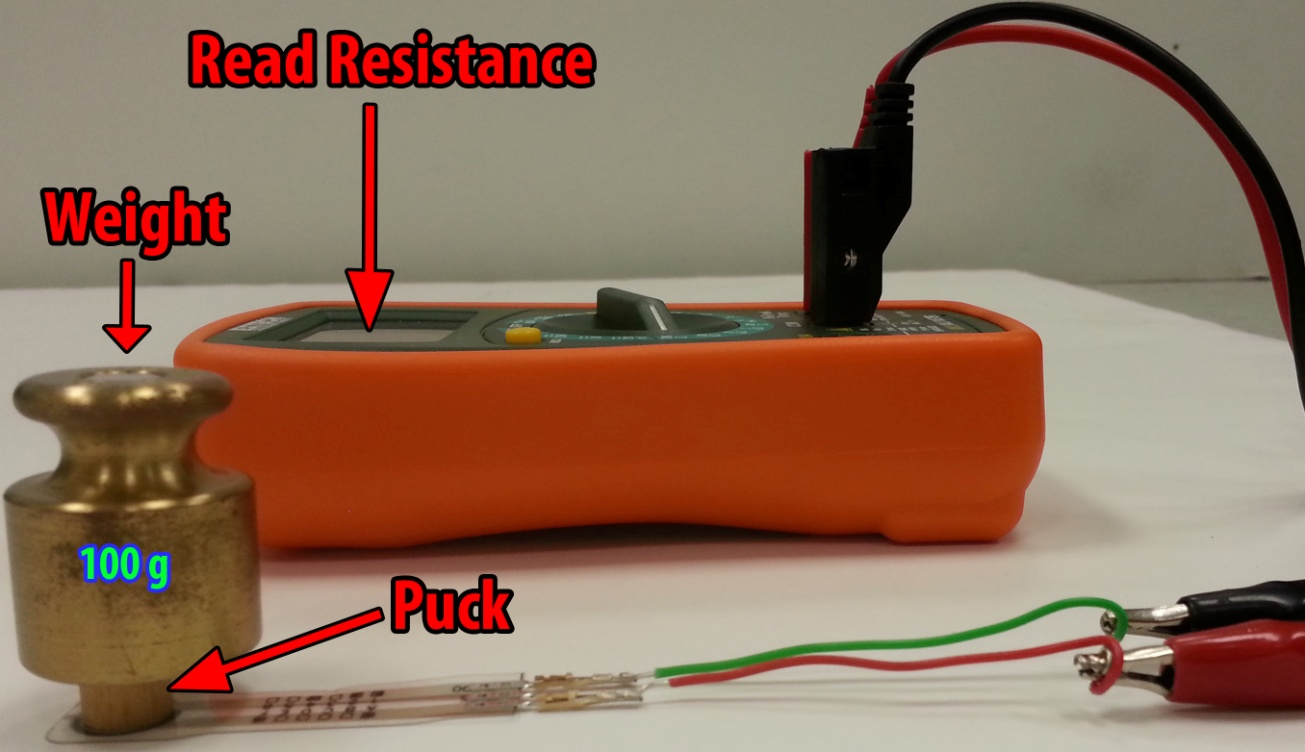


**Figure 3**

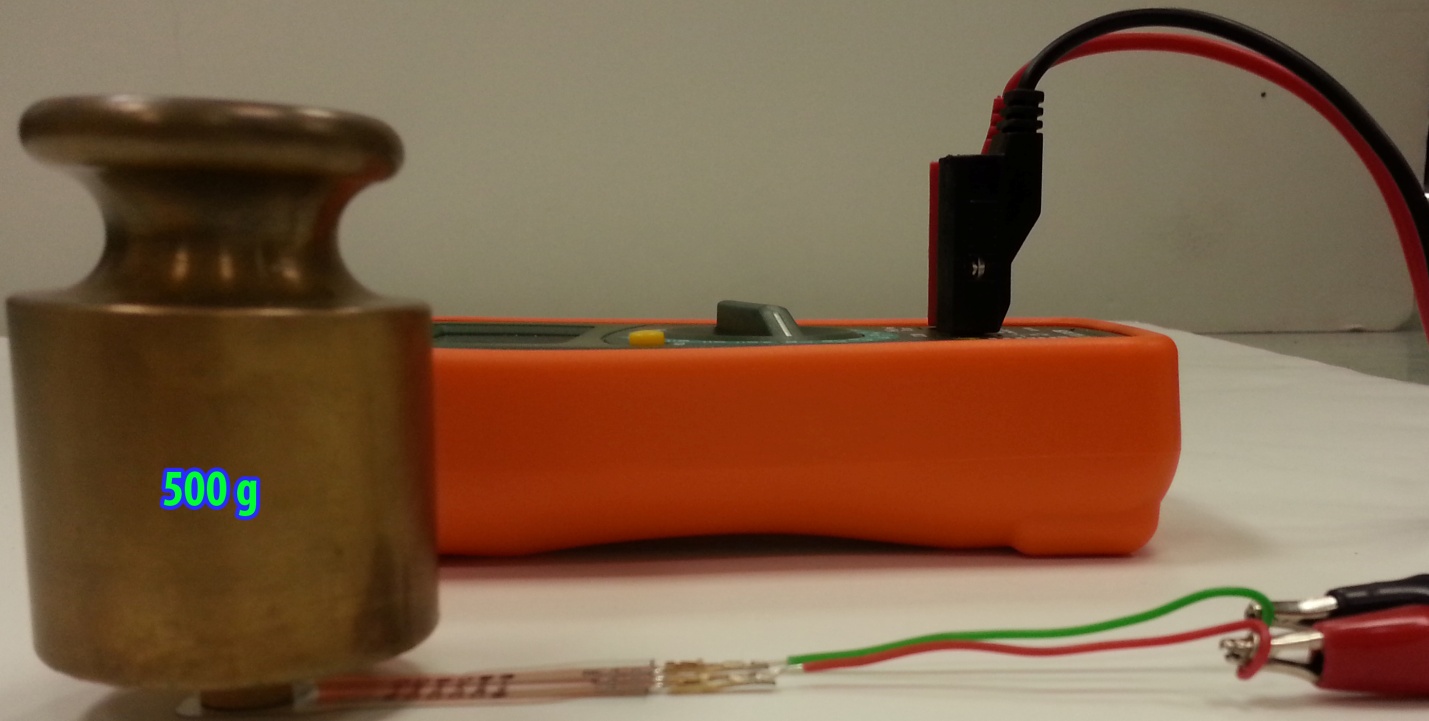
1. **Weights**

Place a weight on the center of your sensor. Make sure the weight is within your sensor weight max.

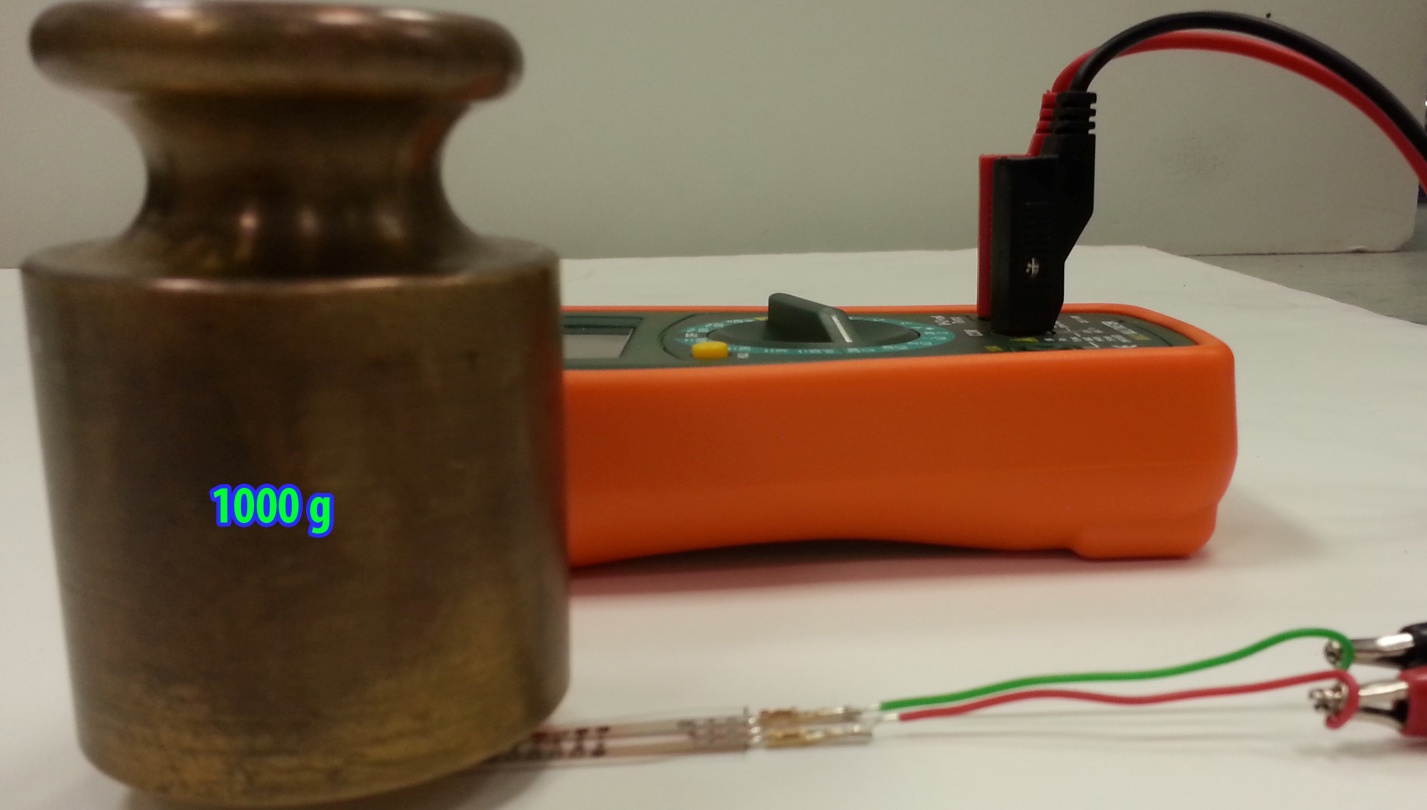
* 1. Record the force and resistance values on the *Calibrating the Force Sensor Data Collection* *Sheet*.
  2. Repeat with different weight values.



**Figure 4A**



**Figure 4B-1**



**Figure 4B-2**