Questions on Piezo Sensor and Wiring:

1. How is the sensor able to send a signal to the Arduino? (How does force activate the piezo?)

Piezo is made of materials that generate a voltage when squished. Voltage is like electrical PRESSURE.

2. Why is there so much extra stuff on the Arduino?

· It can do a lot (at once)
· It can be expanded (piggy backed)

3. What does "const int threshold" mean?

(see next page...)

4. Why does the resistor have to be so large?

Piezos generate a LOT of voltage. (But very little current). The resistor LOWERS the voltage and extends the current.

5. If it doesn't work, how can you tell if it's wired wrong or programmed wrong?

Copy & paste the code. (It works.)

6. Why does the piezo have to be plugged into the analog rather than the digital pins?

Digital pins are either on (5v) or off (0V).

Analog pins can read a range of values (0 – 1024)

0v   5v

Variables, constants, and declarations:

Variable is a code word for a value
that will change as a sketch runs.

Constant is a code word for a value
that <u>won't</u> change.

Declarations tell the Arduino:
 · Code word you'll use
  · <u>Type</u> of variable/constant
  · The value or initial value of
   the code word

Your tasks for today:

1. Go to computer lab, log in to Pinnacle, and write down missing assignments that are <u>recent</u> & worth <u>significant points.</u>

2. Complete piezo sketch & wiring

3. Ask instructors...