

NAME: _____
LAST FIRST

DATE: _____

Draw your multimeter below:

Label:

COM port	Symbols
Volt/Resistance port	
Low Amp port	
High Amp Port	
DC Volts	
Red Leads	
Black Leads	
DC Amps (>1 Amp)	
DC Amps (<1 Amp)	
AC Volts	

- a) What is the maximum current (amps) this meter should measure in the low amperage port?
- b) What is the easiest way to break the multimeters?

Rules for testing electrical equipment and using multimeters:

1. Safety Gear:

-
-
-

2. Why should you not work alone?

3. Safe measurement technique includes:

I.

II.

III.

4. Test 1 Solar Panel

Draw the set-up

Volts

Draw the set-up

Isc Reading (units)

5. Test 2 small panels wired together (Ask before DOing THIS WITH BIG PANELS)

Draw the set-up

Voc (Voltage Open Circuit)

Draw the set-up

Isc Reading (units)

6. Test the larger panel

Draw the set-up

Voc (Voltage Open Circuit)

Draw the set-up

Isc Reading (units)

7. **Resistance:** What is the resistance of....

- Air
- Dry skin
- Moist skin
- Aluminum foil
- Thin copper wire
- Thick copper wire

Challenges:

A. Create a circuit with solar panels an open circuit voltage (Voc) of more than 3V

B. Create a circuit with an open circuit voltage (V_{oc}) of more than 6V