Voltage Divider

Equipment

- Protoboard Workstation
- Oscilloscope
- DMM

Objective

Learn how to use the oscilloscope
- Measure current
- Assign appropriate uncertainty

Learn how to use breadboard
Analyze and construct voltage divider circuits.
Graph voltage-current relationship

Conceptual (C-level)

Draw a diagram of a voltage divider with a 9V input and 2.7 V output
- What value resistors should you use?

Draw a IV curves for the following components.
- Resistor
- Diode (LED)

How can you measure current in a circuit using an oscilloscope?

Basic Lab (B-level)

Design a circuit to light an LED.

Maximize the light output by adding additional LEDs.

What changes need to be made if the source voltage is AC instead of DC

Advanced/Extended Lab (A-level)

- Measure the LUX vs current for a diode