



Series Circuits

PSI Physics

Name _____

Date: _____ Period: _____

Objectives:

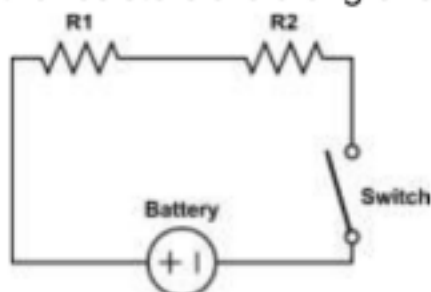
- Measure and calculate voltage drops across any part of a series circuit
- Measure and calculate the current through any part of a series circuit
- Find the equivalent resistance for a series circuit

Materials:

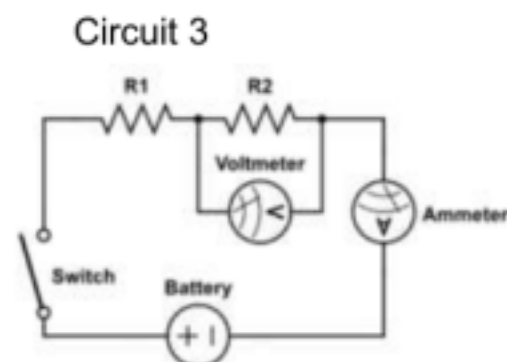
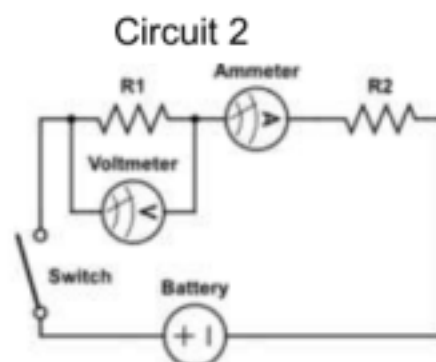
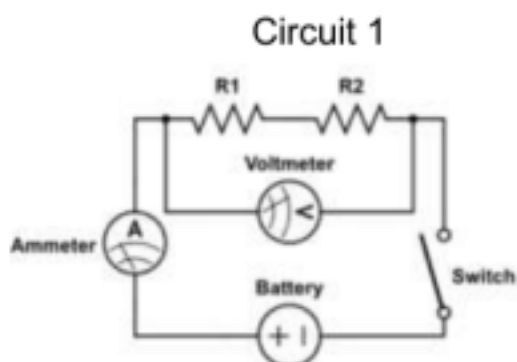
- Battery (or DC Power Source)
- Connecting wires
- Two resistors
- Knife switch
- Ammeter
- Voltmeter

Series Circuits

Series circuits are circuits where all the resistors are along one path that has no branches.



Procedure: For each of circuits 1, 2 and 3 below:



1. Construct the circuit. Make sure that the ammeter is in line with the resistors, and that the voltmeter is connected as shown.
2. Record the current and voltage drops.

Data:

Circuit 1		Circuit 2		Circuit 3	
I	V	I_1	V_1	I_2	V_2