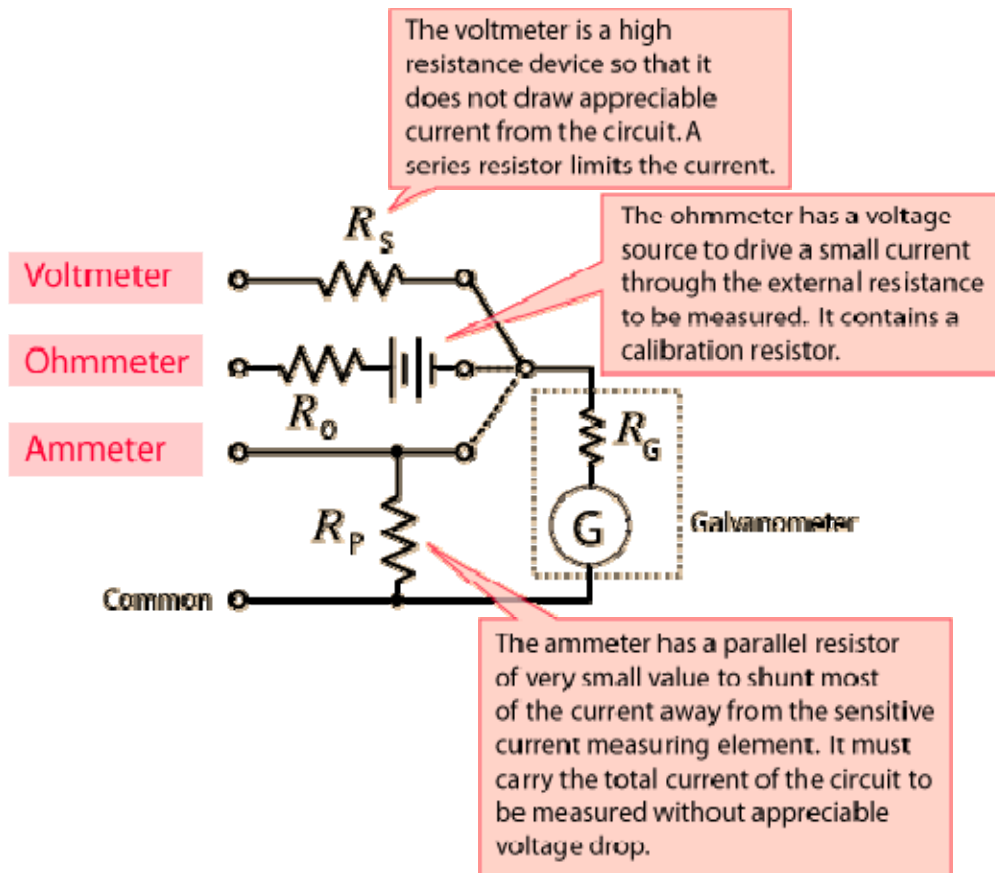
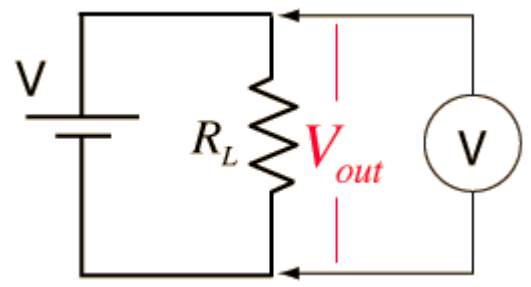
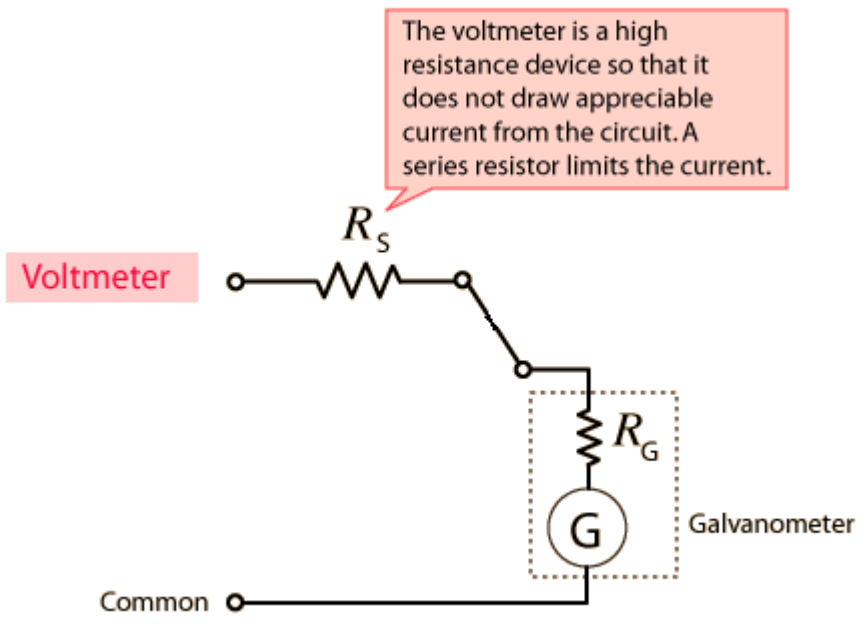
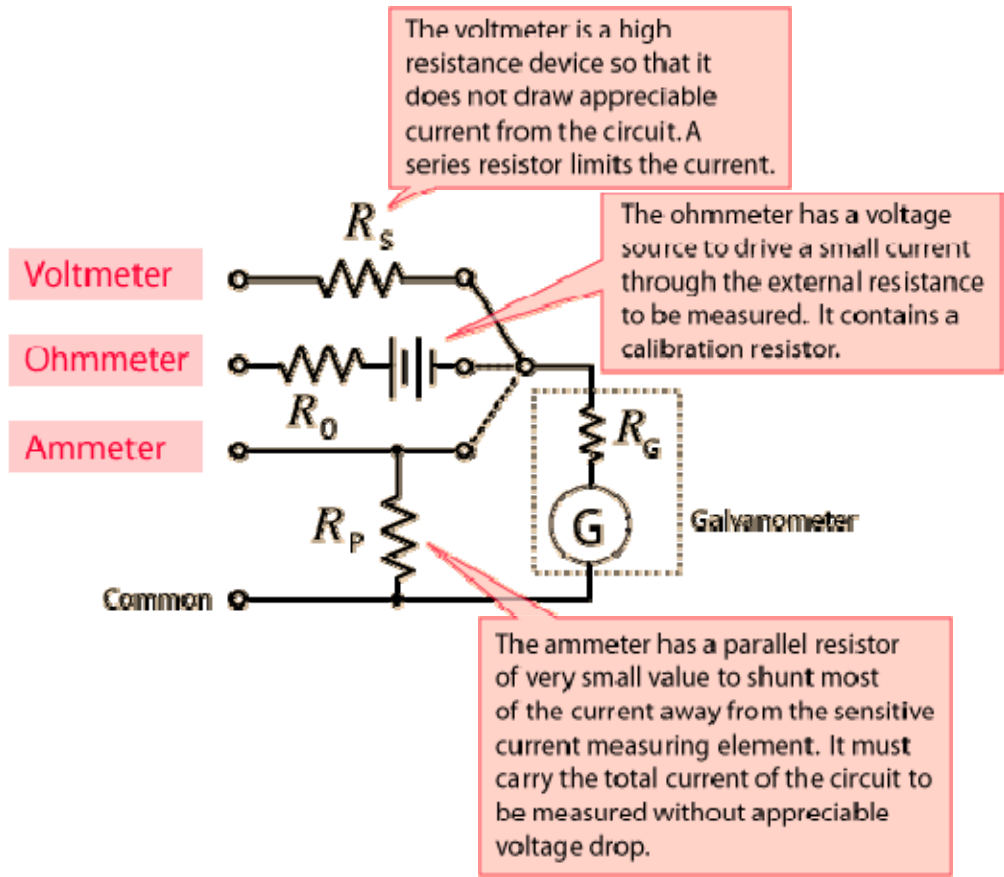


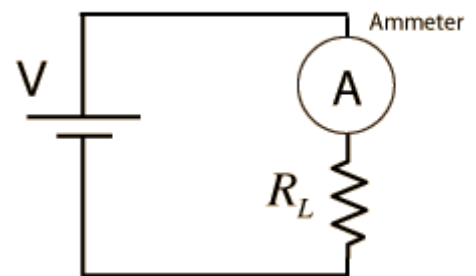
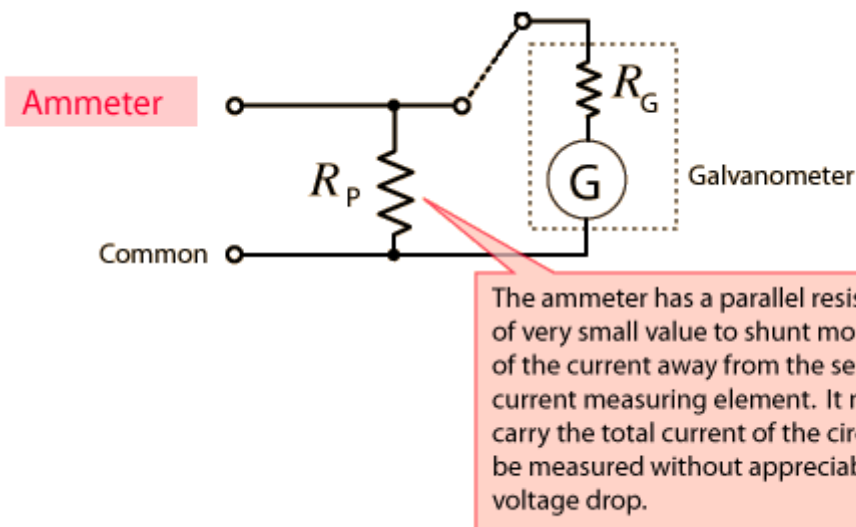
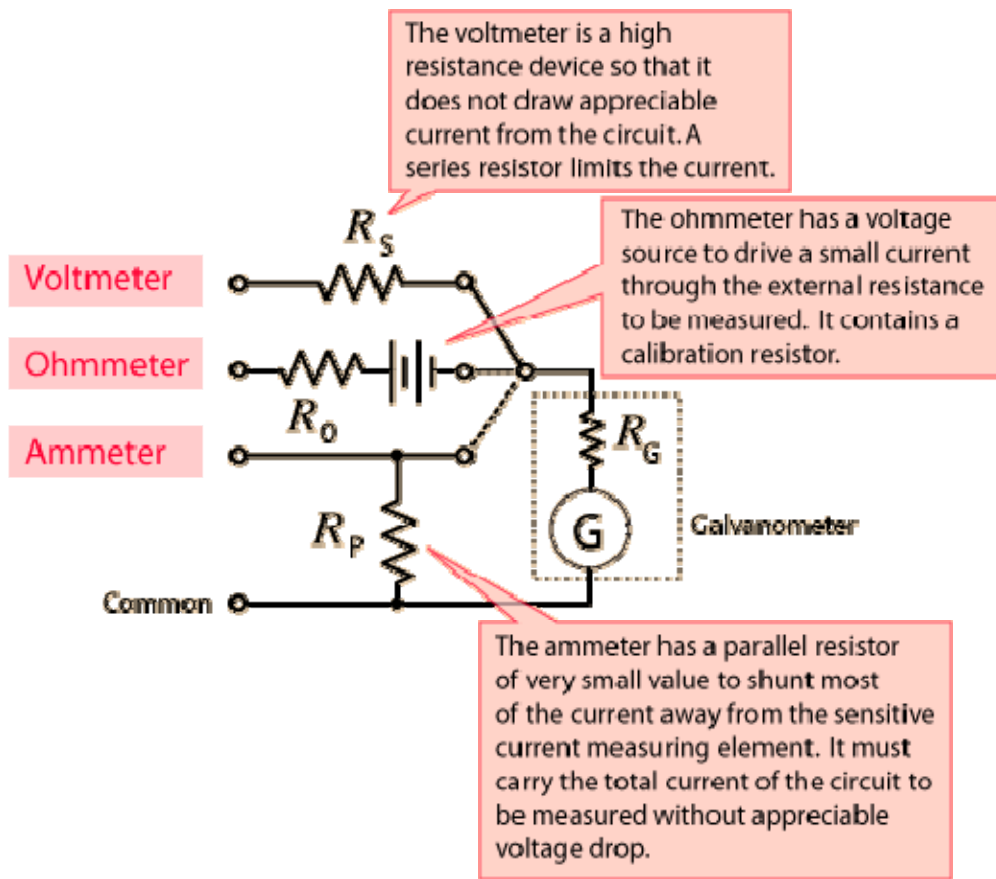
Galvanometer Based Multimeter Voltmeter, Ammeter, Ohmmeter



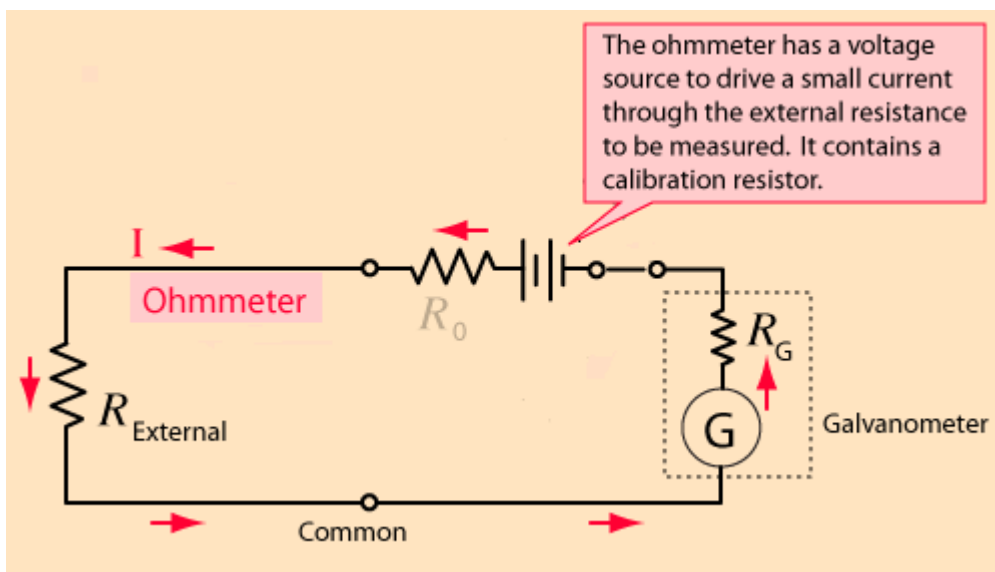
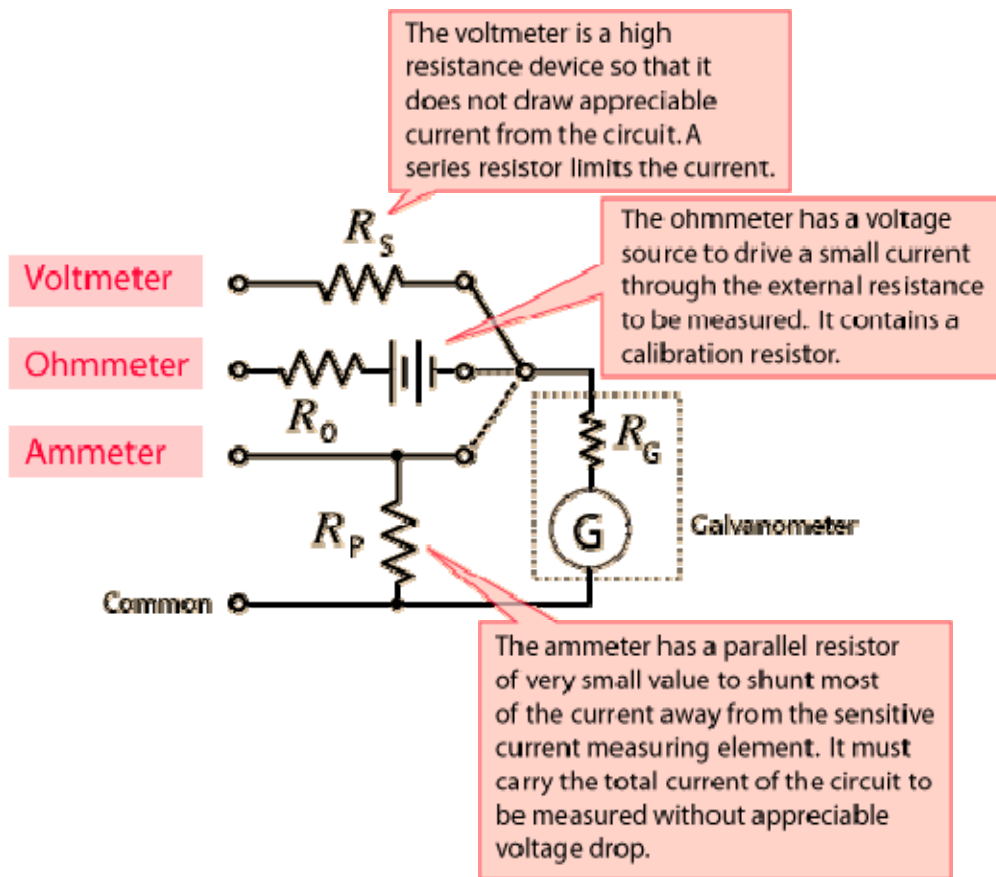
<http://hyperphysics.phy-astr.gsu.edu/hbase/magnetic/galvan.html>



A voltmeter is connected in parallel with the circuit element (R_L) to measure voltage.



A ammeter is always connected in series with the circuit element (R_L) to measure current.

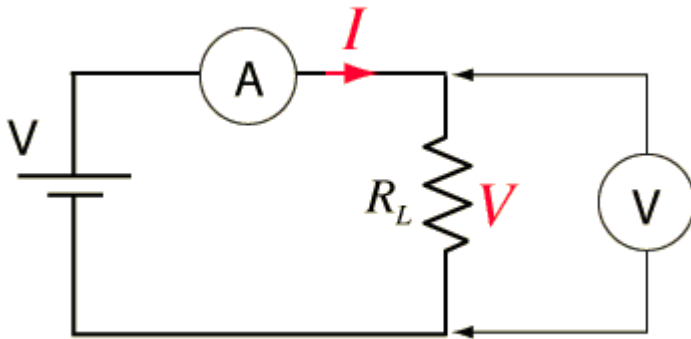


The circuit element (R_L) must be disconnect from the circuit in order to measure resistance with an ohmmeter.

In lieu of an *ohmmeter*,

an *ammeter* is placed in series with the circuit element of interest R_L and the current is noted;

and a *voltmeter* is connected in parallel with the circuit element R_L and the voltage is noted.



The Resistance R_L equal to $R_L = \frac{V}{I}$