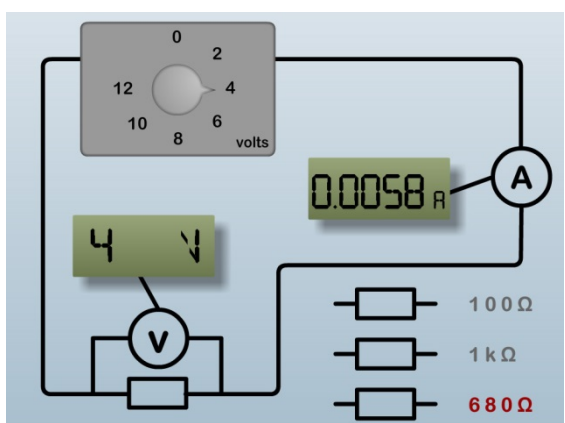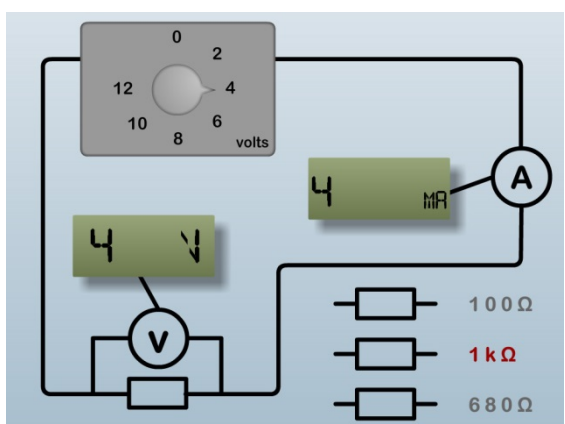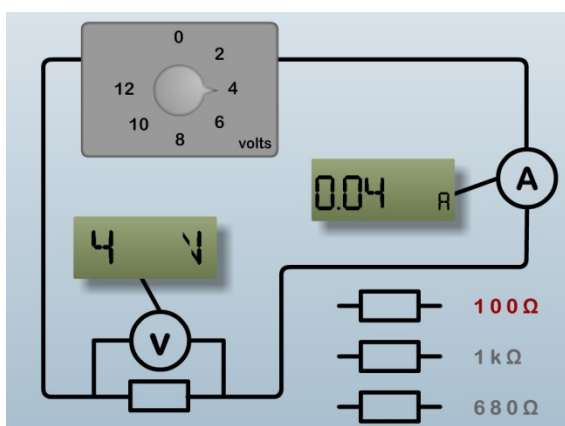# APPLYING OHM'S LAW IN ELECTRONIC CIRCUITS

In some instances a unit might be rather large and in others rather small. This tends to introduce a large number of '0's into calculations. The amp is a large unit of current, and in most electronic circuits we are dealing with currents which are more conveniently expressed in milli-amps (mA).

1mA = 0.001A

The ohm is a rather small unit of resistance. Resistors used in electronic circuits have values which are often greater than a thousand ohms. In such cases it is more convenient to express their values in kilohms (k Ω )

When dealing with electronic circuits we often find that using volts, milliamps and kilohms in Ohm's law makes calculations much simpler.

V (volts) / I (mA) = R (kilohms)

1 kΩ = 1000Ω

V = I x R

$I = \dfrac{V}{R}$

$R = \dfrac{V}{I}$