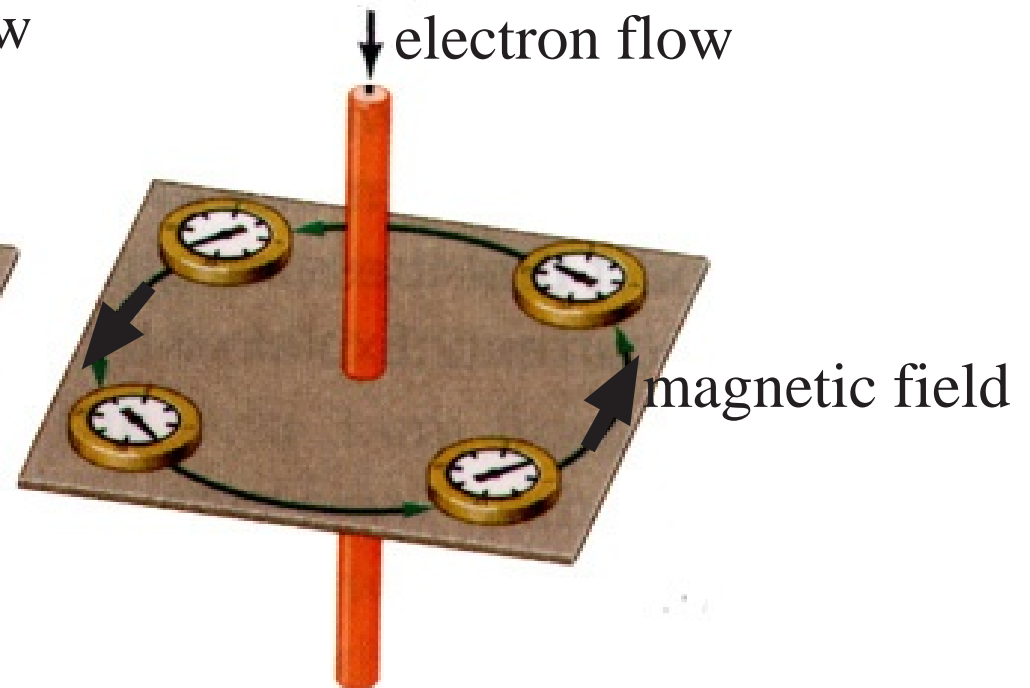
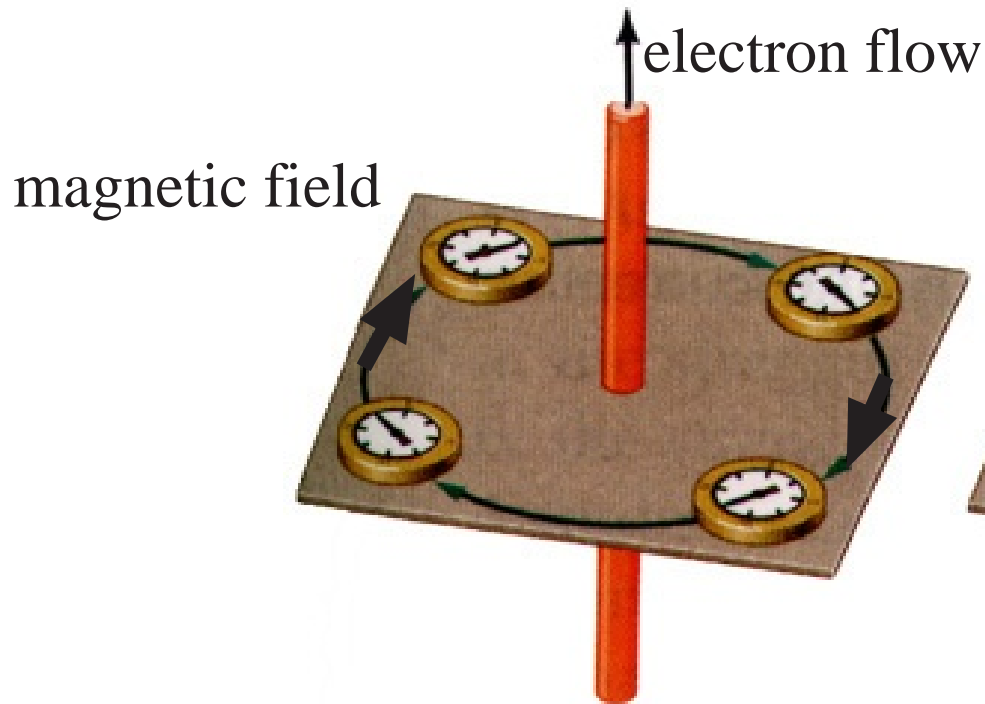
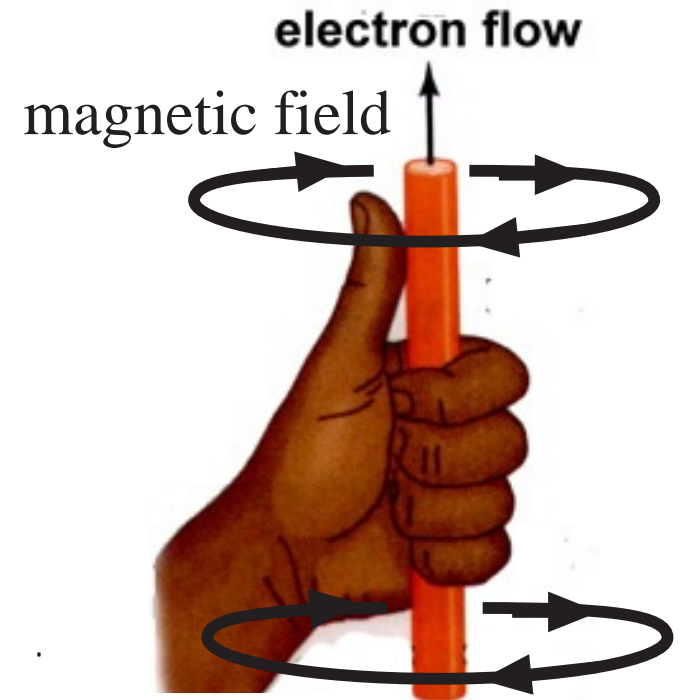


# 1st Left Hand Rule

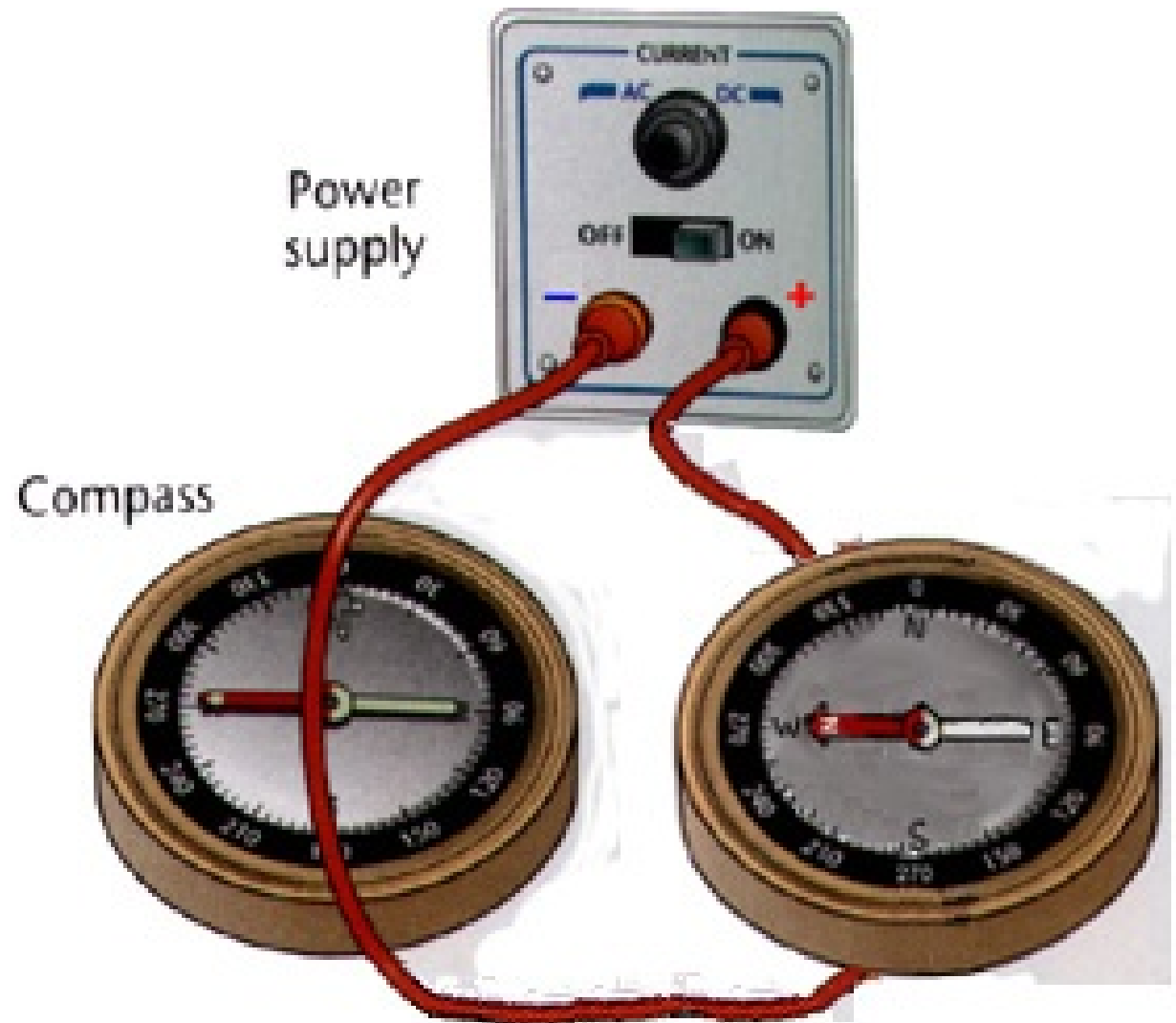
Magnetic fields are generated by moving charges. Negative particles and positive particles generate magnetic fields in opposite directions. DC electricity moves electrons from the negative to positive terminal of a battery.

The direction of the magnetic field can be determined using the first left hand rule. To use the rule

- point your thumb in the direction of electron flow
- your fingers will wrap in the direction of the magnetic field (the direction of the magnetic field)



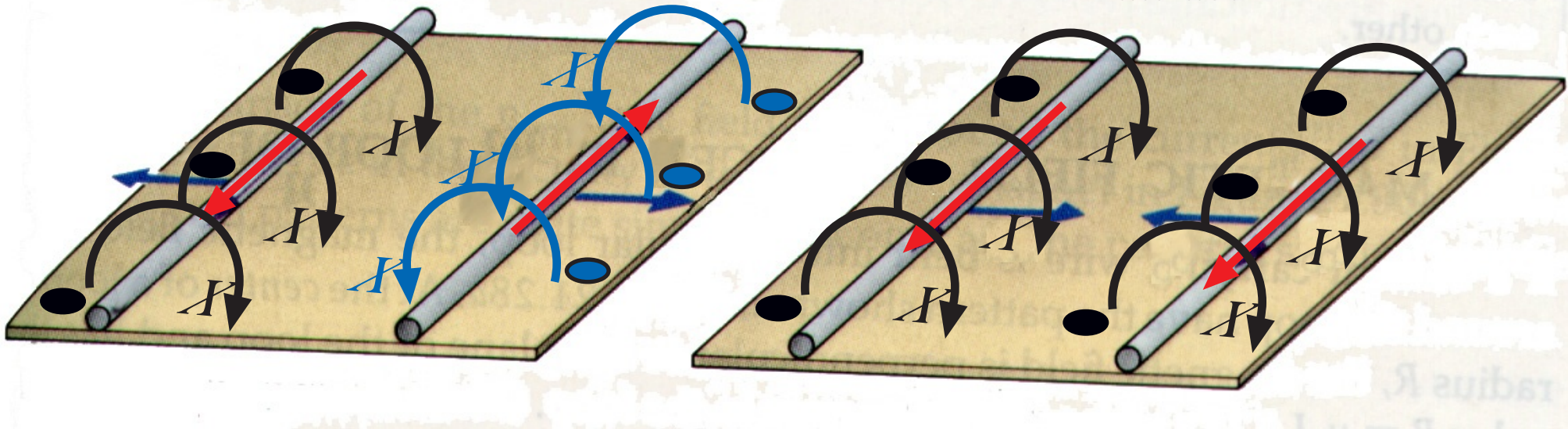
# ORSTEAD'S EXPERIMENT



# Forces in current carrying wires

similar fields  
repel

opposite fields  
attract



magnetic field  
out of the page



electron flow



magnetic field  
into the page

