

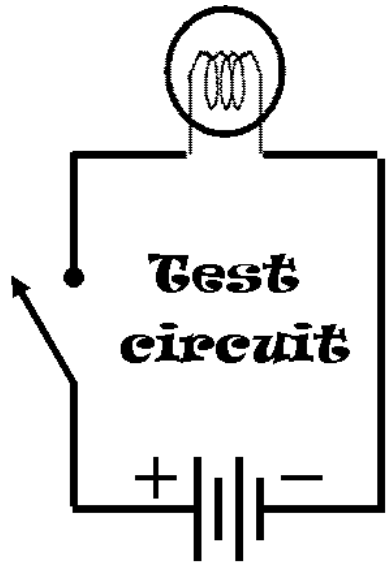


Electricity

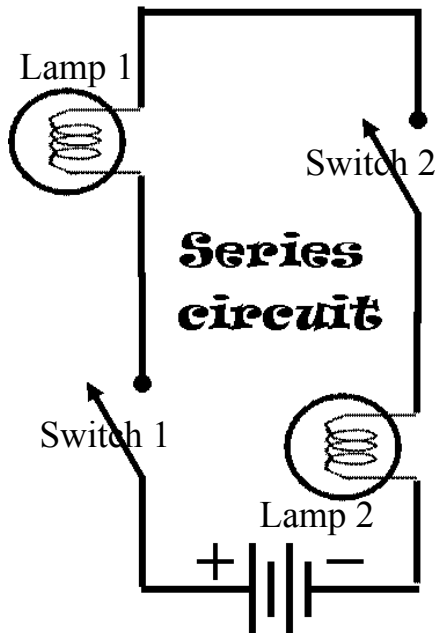
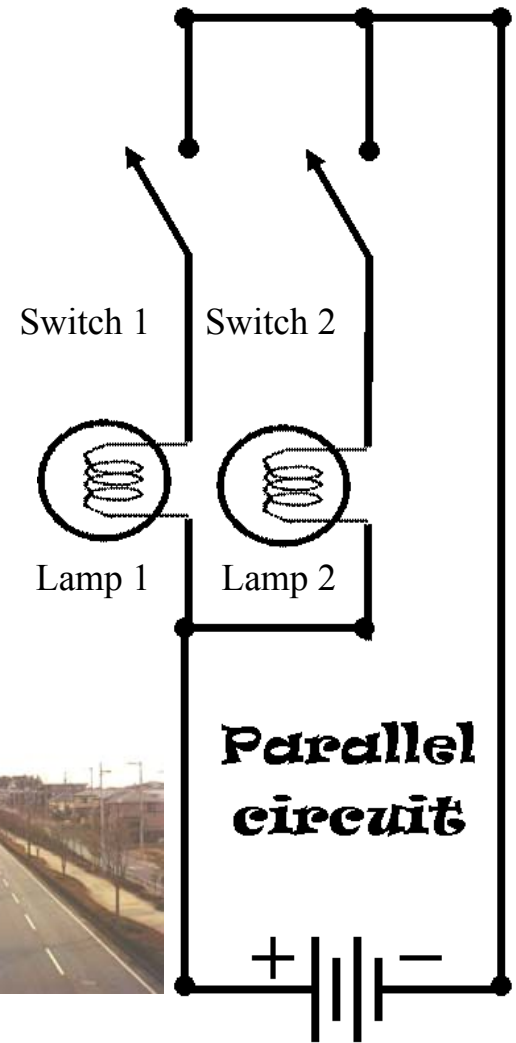
Parallel & Series Circuit Lab

Read Me

- Build the test circuit.
- Build the series circuit & fill out the table.
- Build the Parallel circuit & fill out the table.

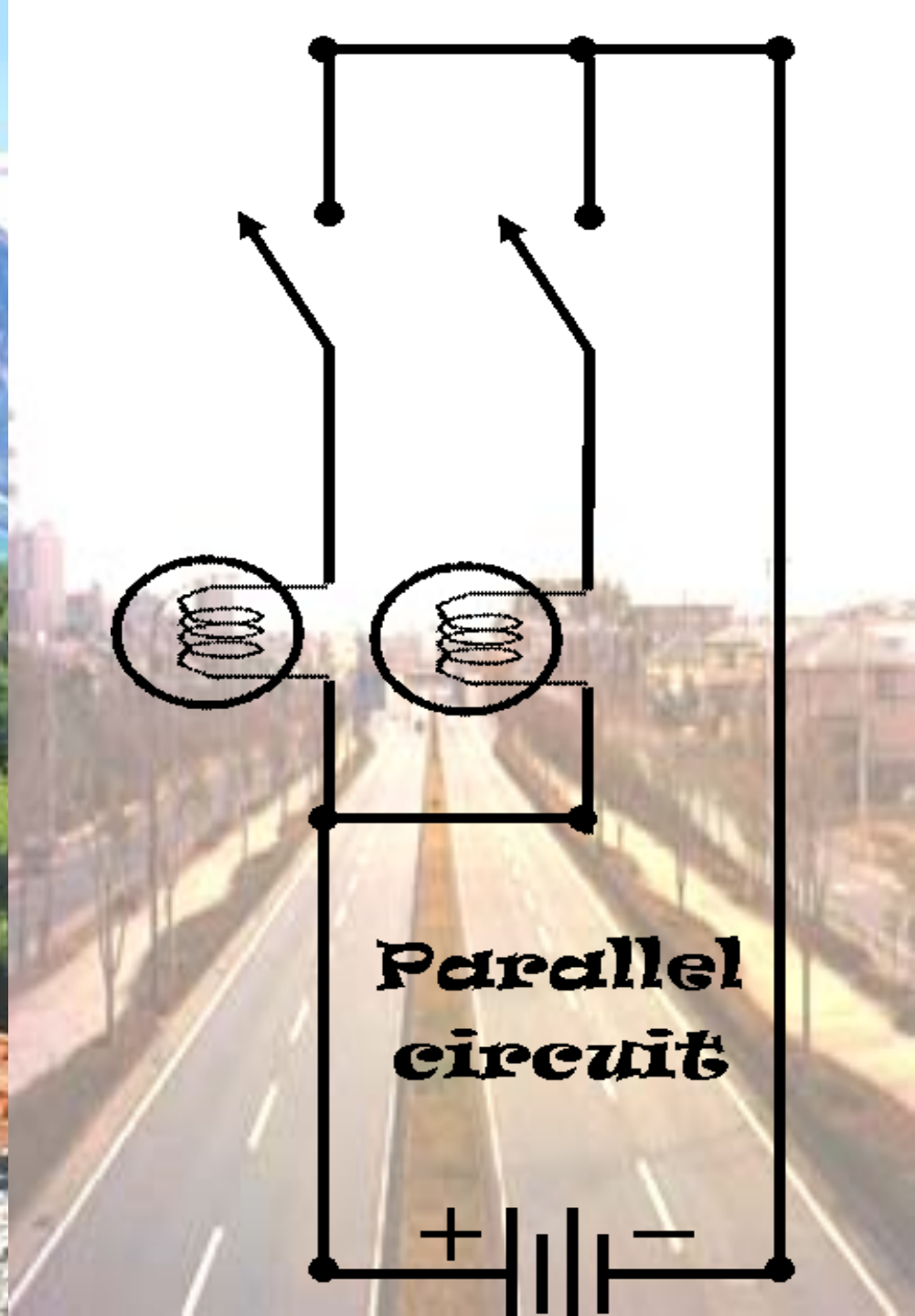


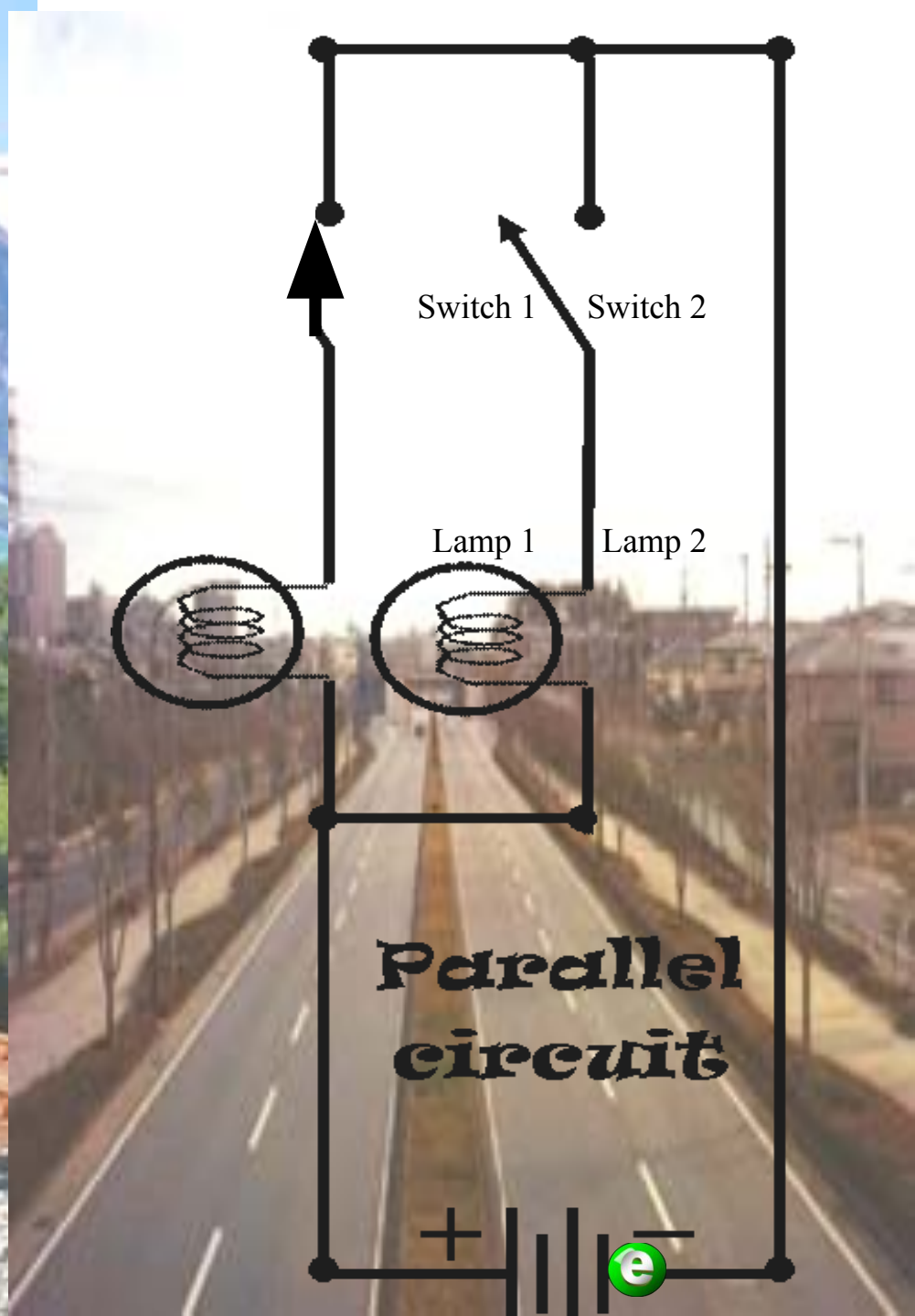
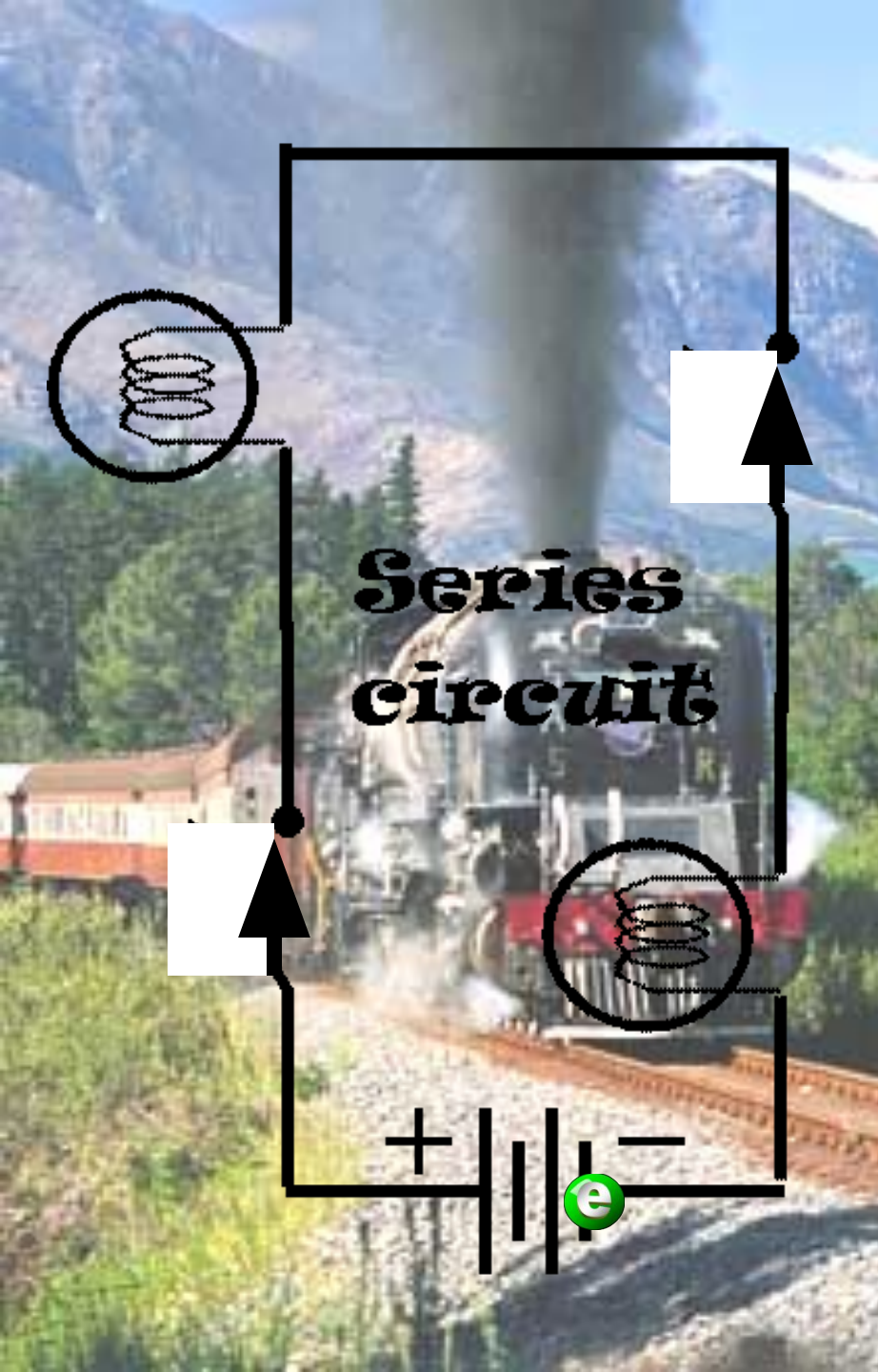
Legend
Switch
Battery D.C. Power Supply
Lamp
Resistor
Capacitor
Diode



Switch 1	Switch 2	Lamp1	Lamp 2
Off	Off		
On	Off		
Off	On		
On	On		

Switch 1	Switch 2	Lamp1	Lamp 2
Off	Off		
On	Off		
Off	On		
On	On		





EI Motor

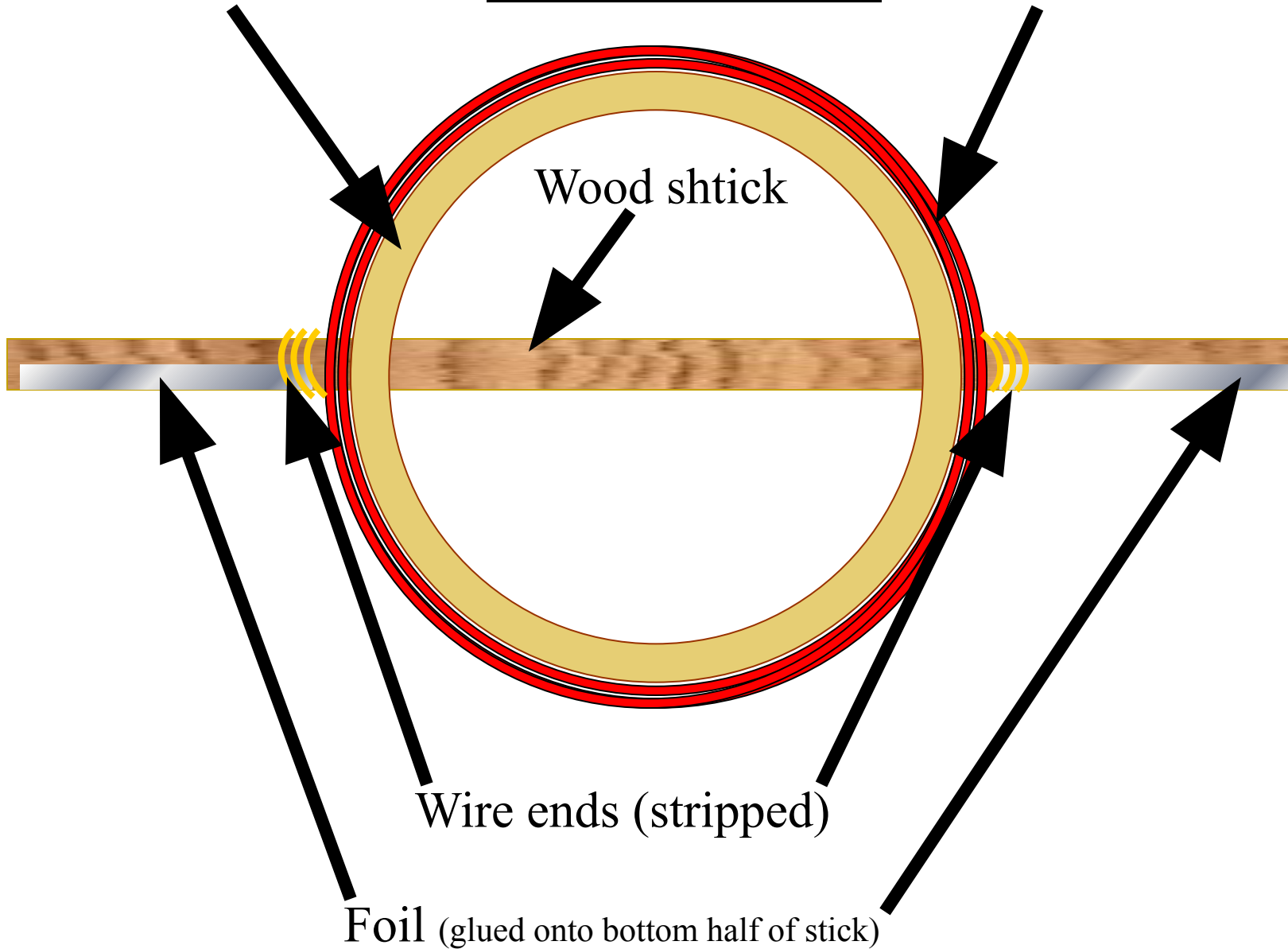
Cardboard tube

Wire coil (covered with glue)

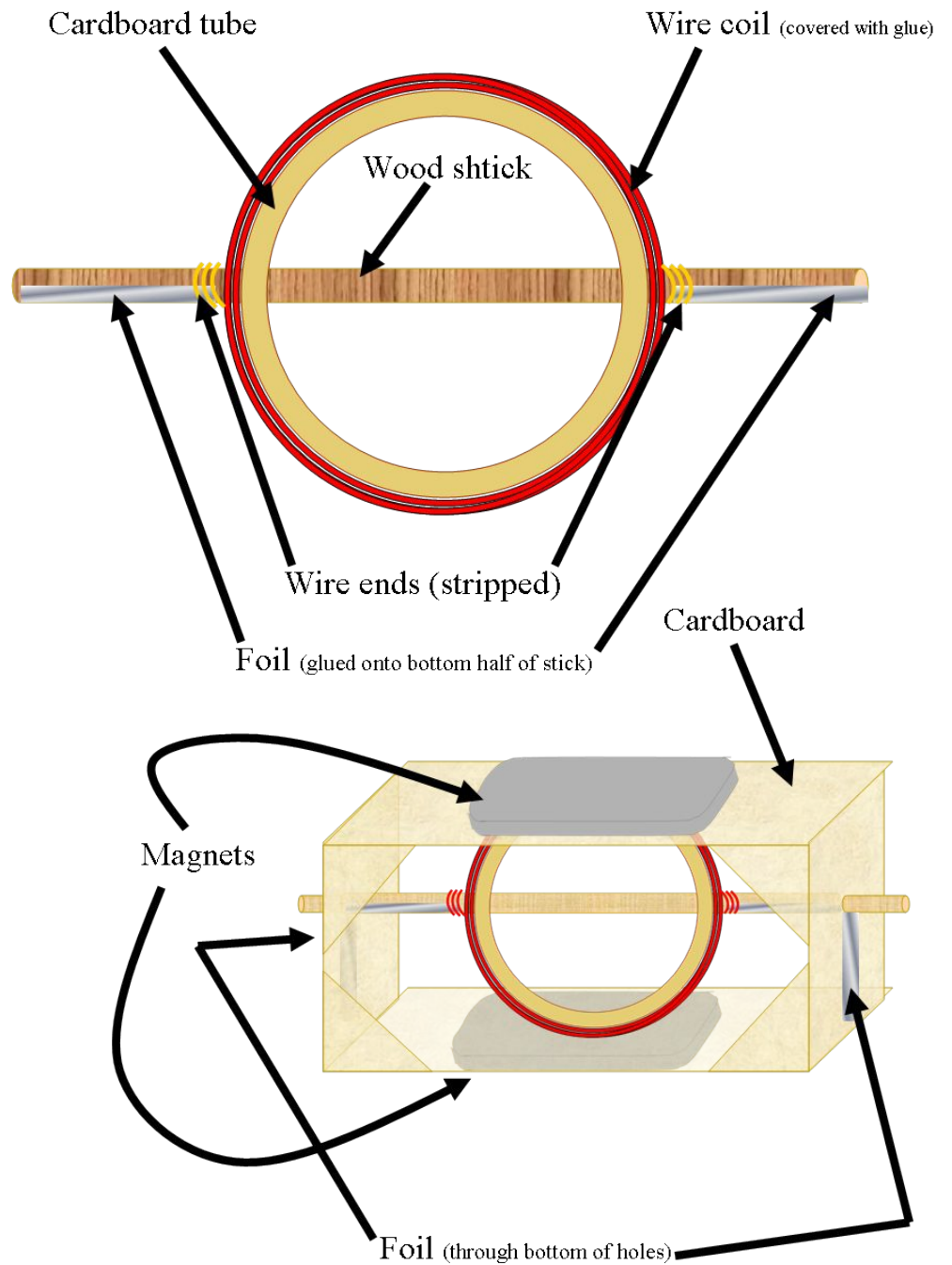
Wood shtick

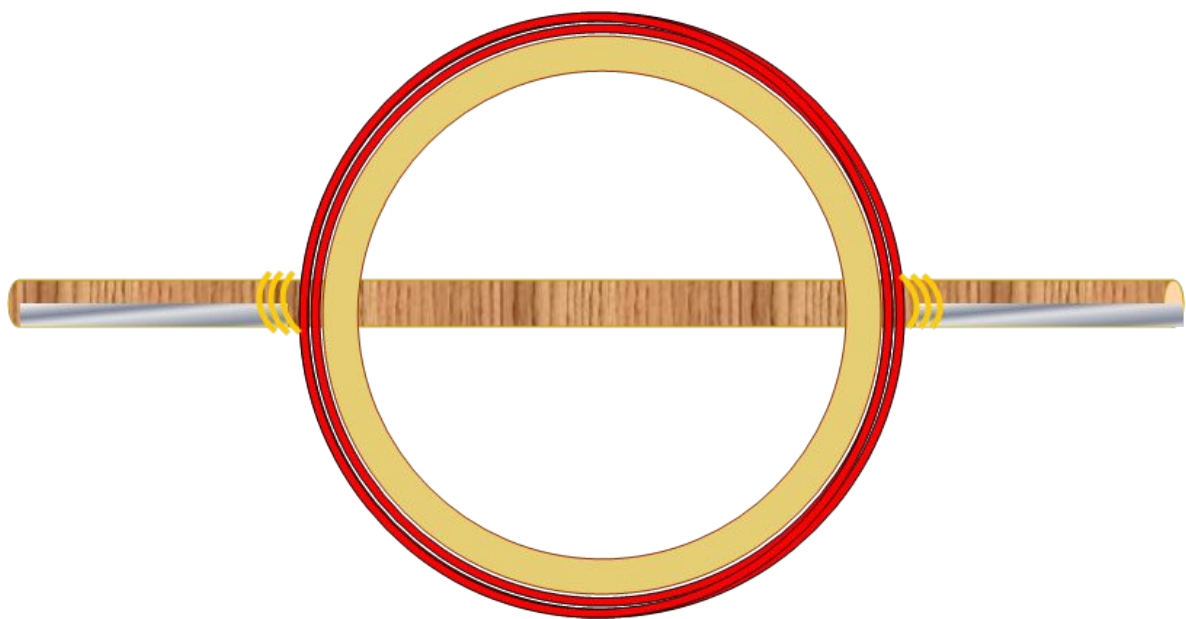
Wire ends (stripped)

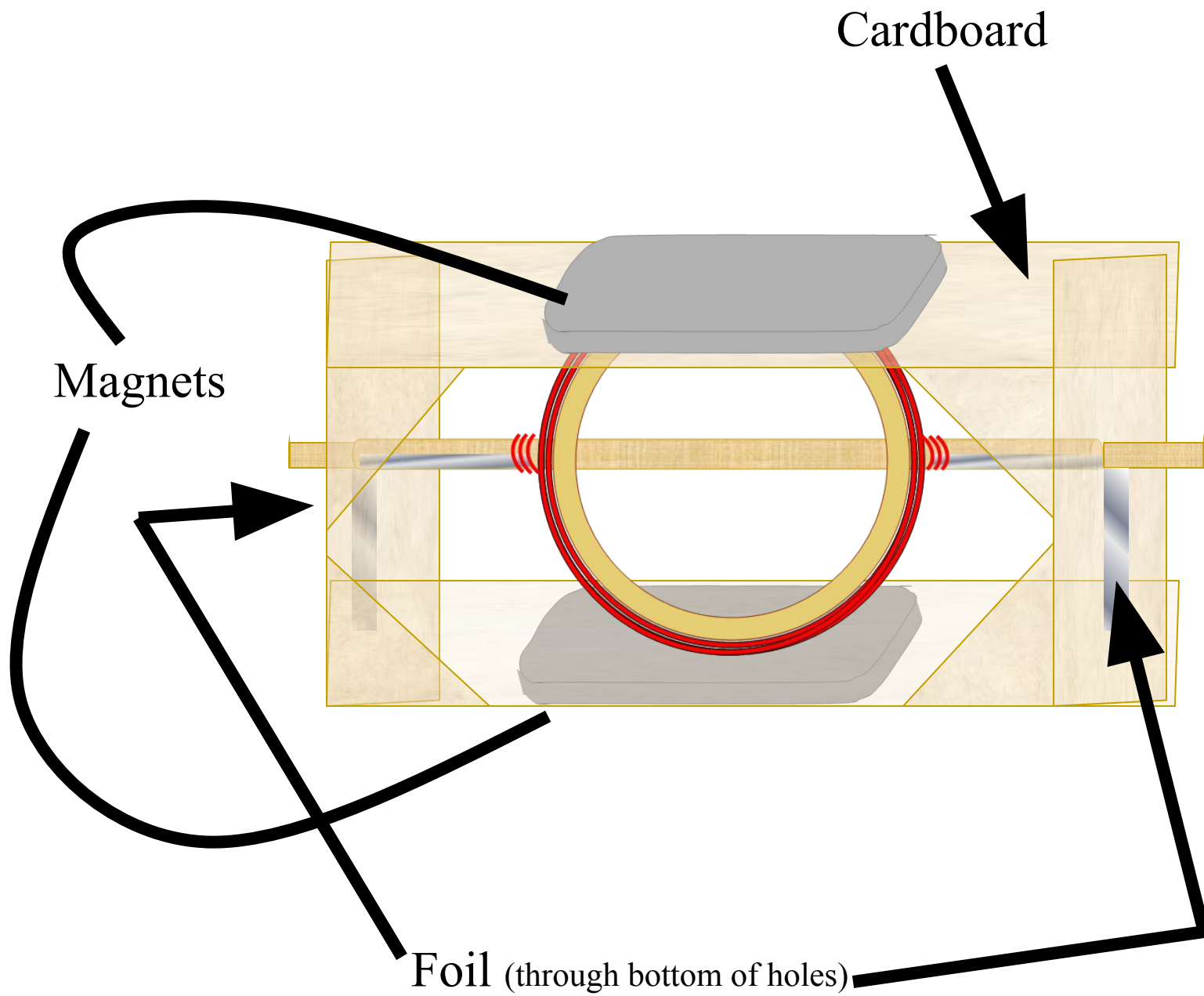
Foil (glued onto bottom half of stick)

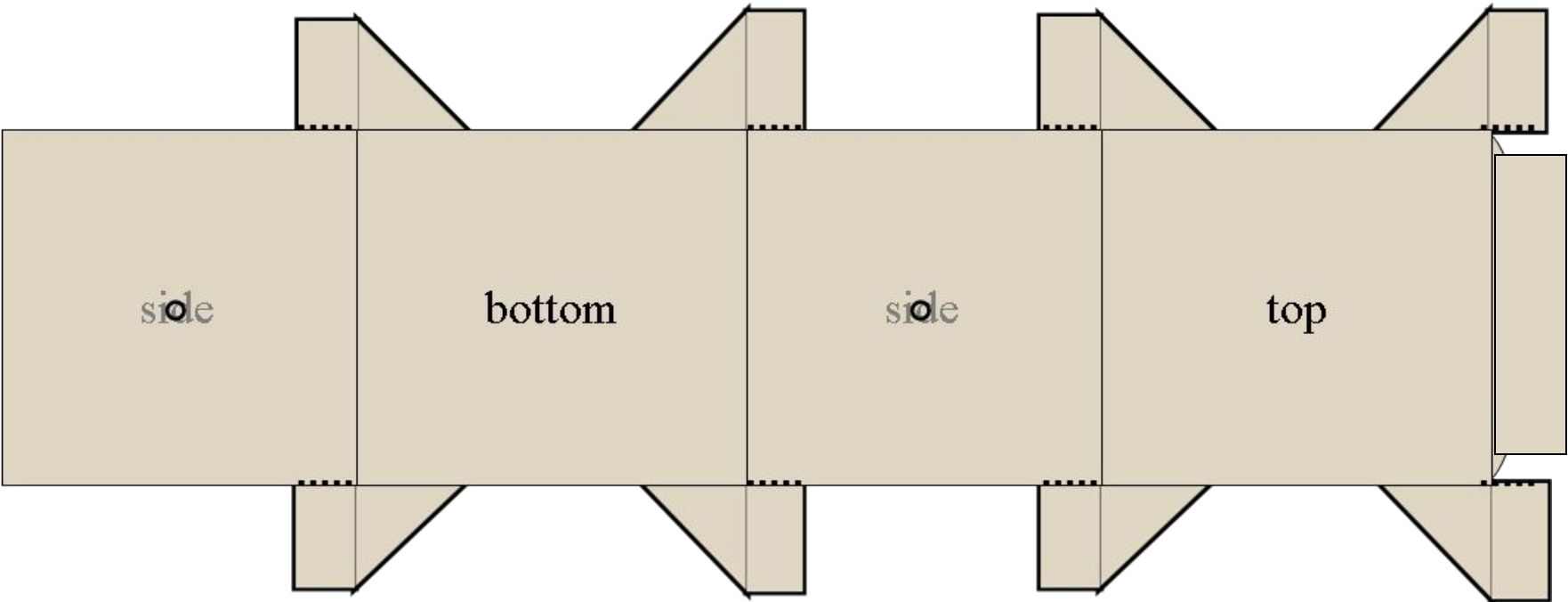
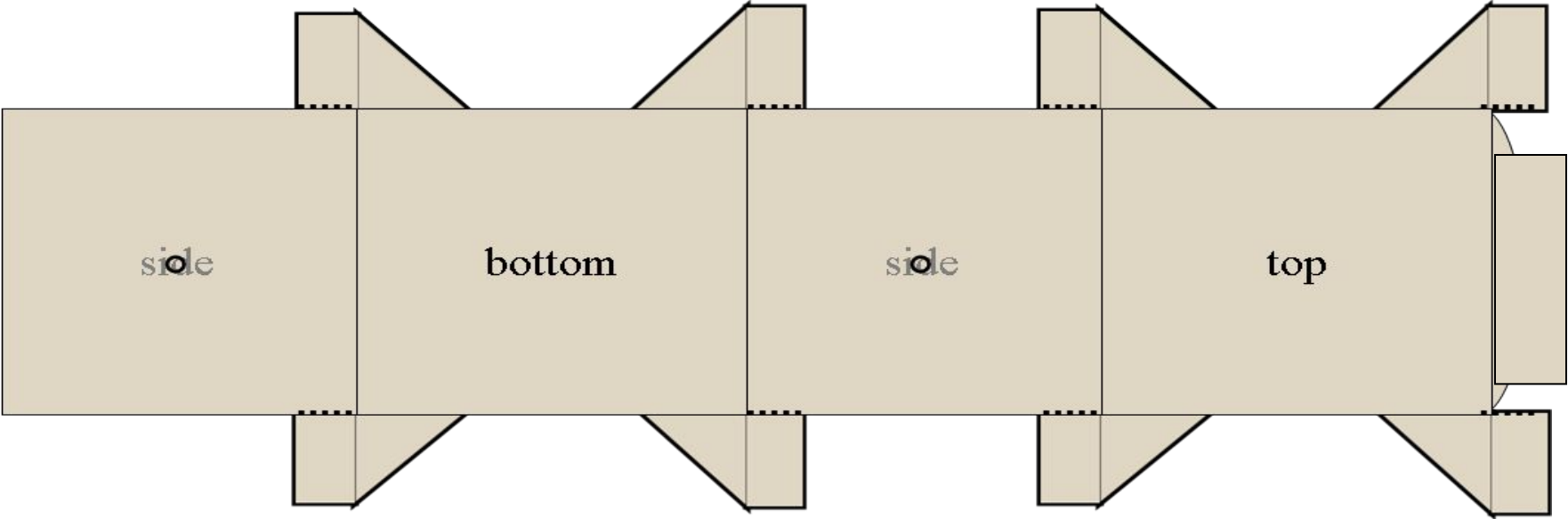


EI Motor









Vibration/ wave

mechanical oscillations about an equilibrium point.

Earthquake

Sound

Trampoline

Pendulum

Spring (car)

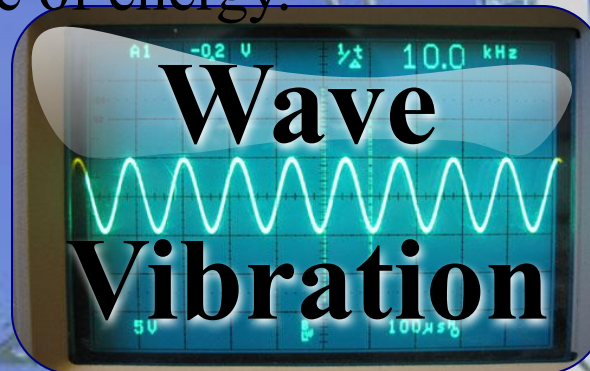
guitar string

Ocean

Wave

a disturbance that propagates through space and time,
usually with transference of energy.

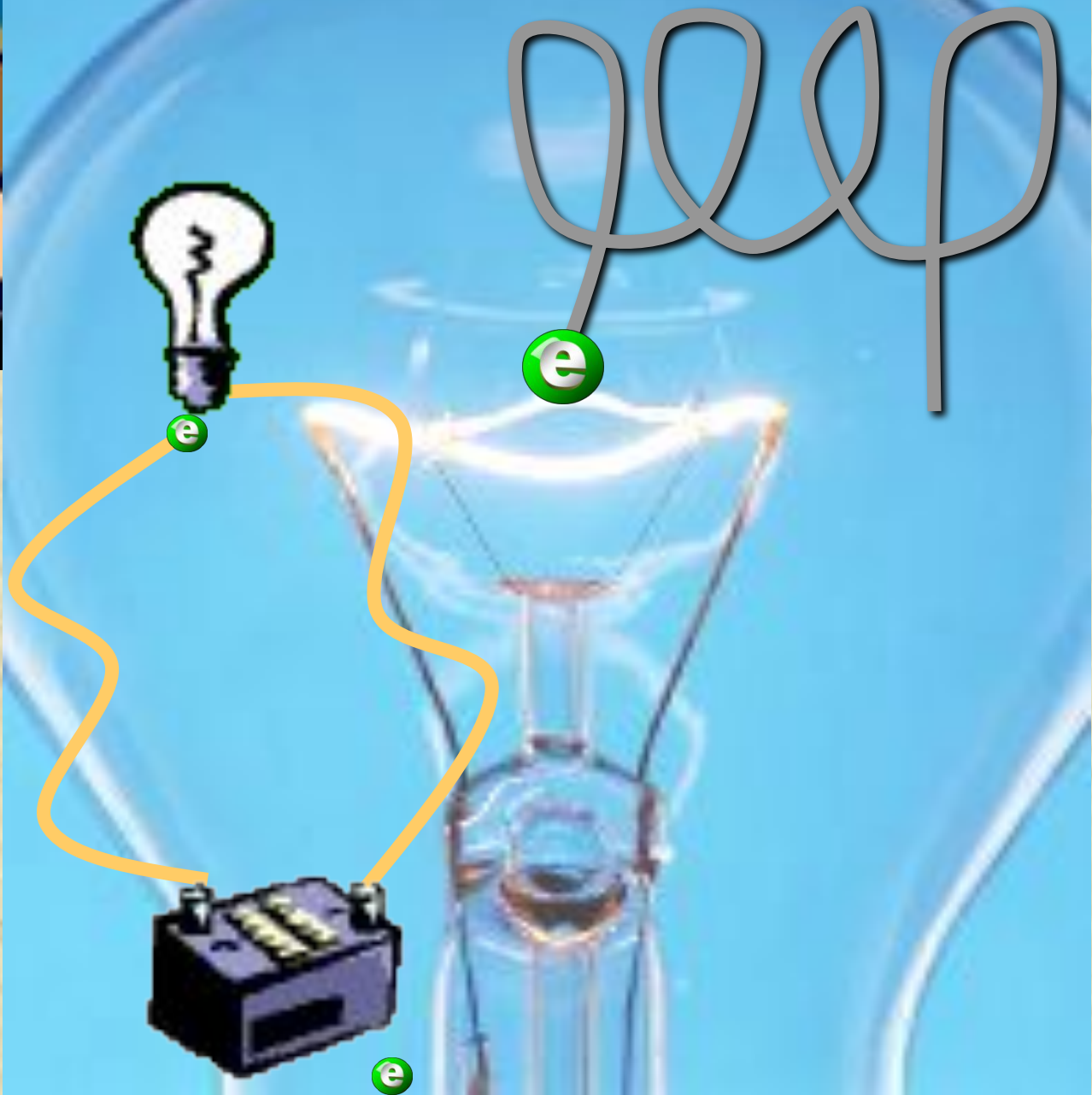
Potential





Electricity

filament



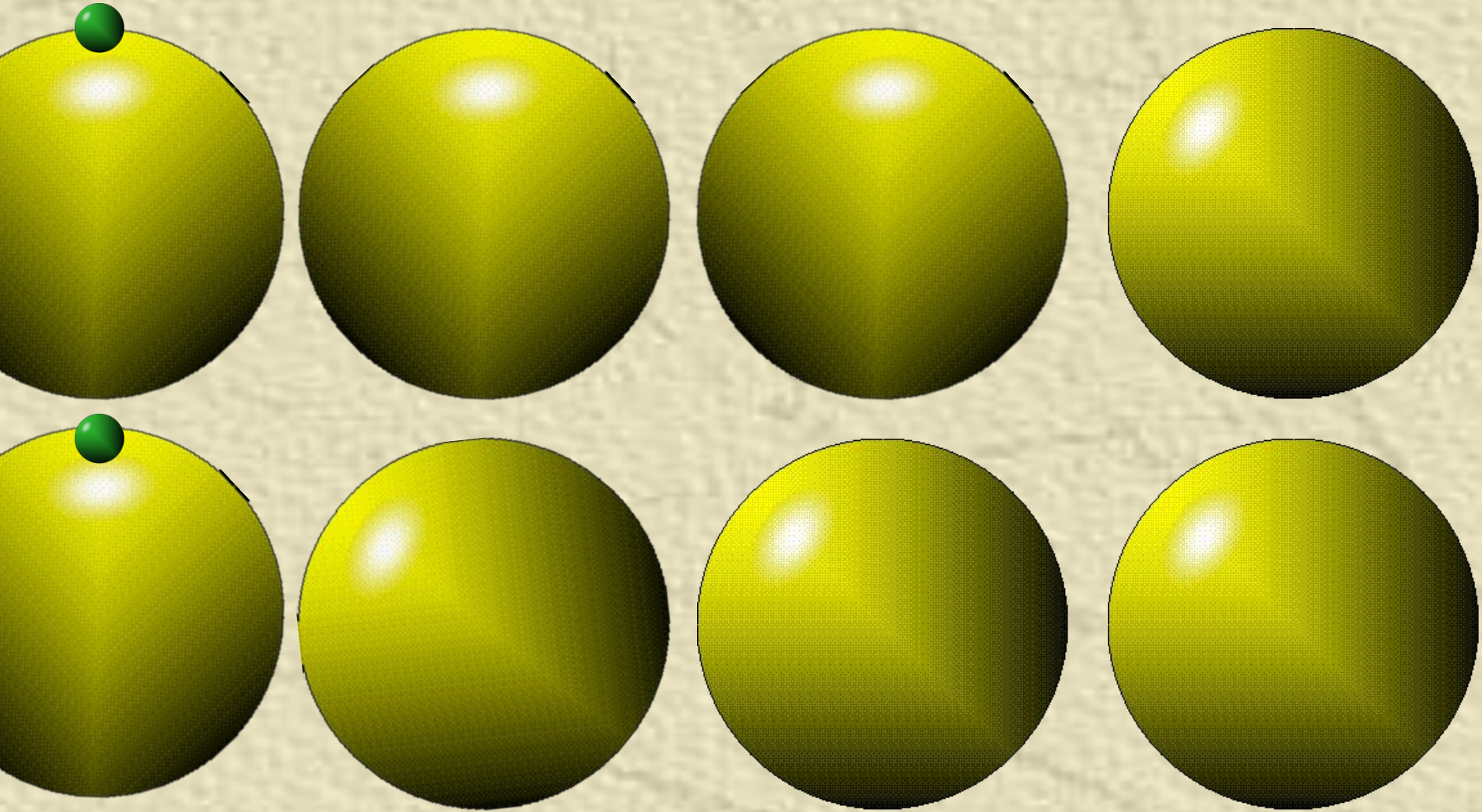
D.C.

Direct Current

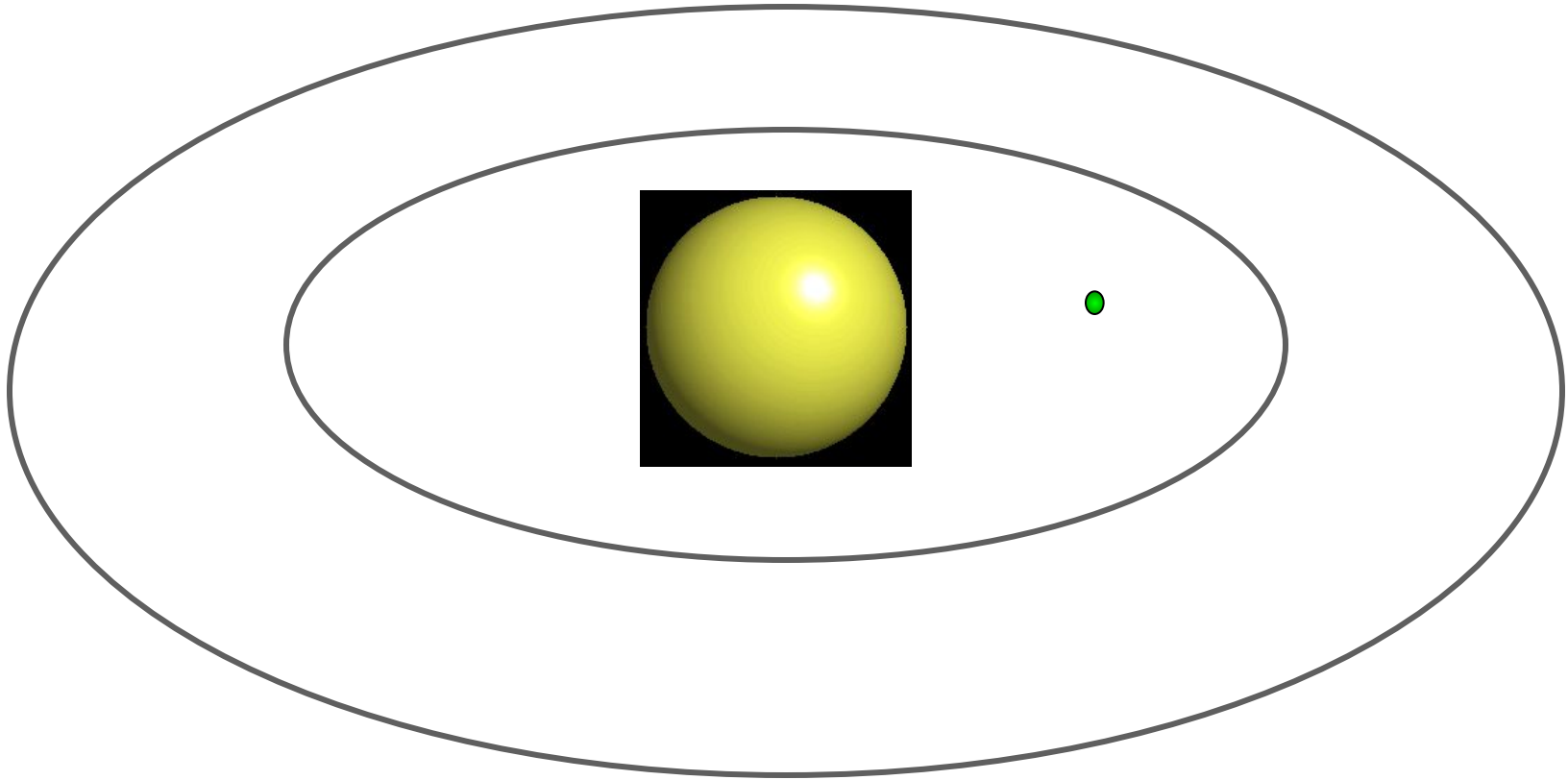
A.C.

Alternating Current

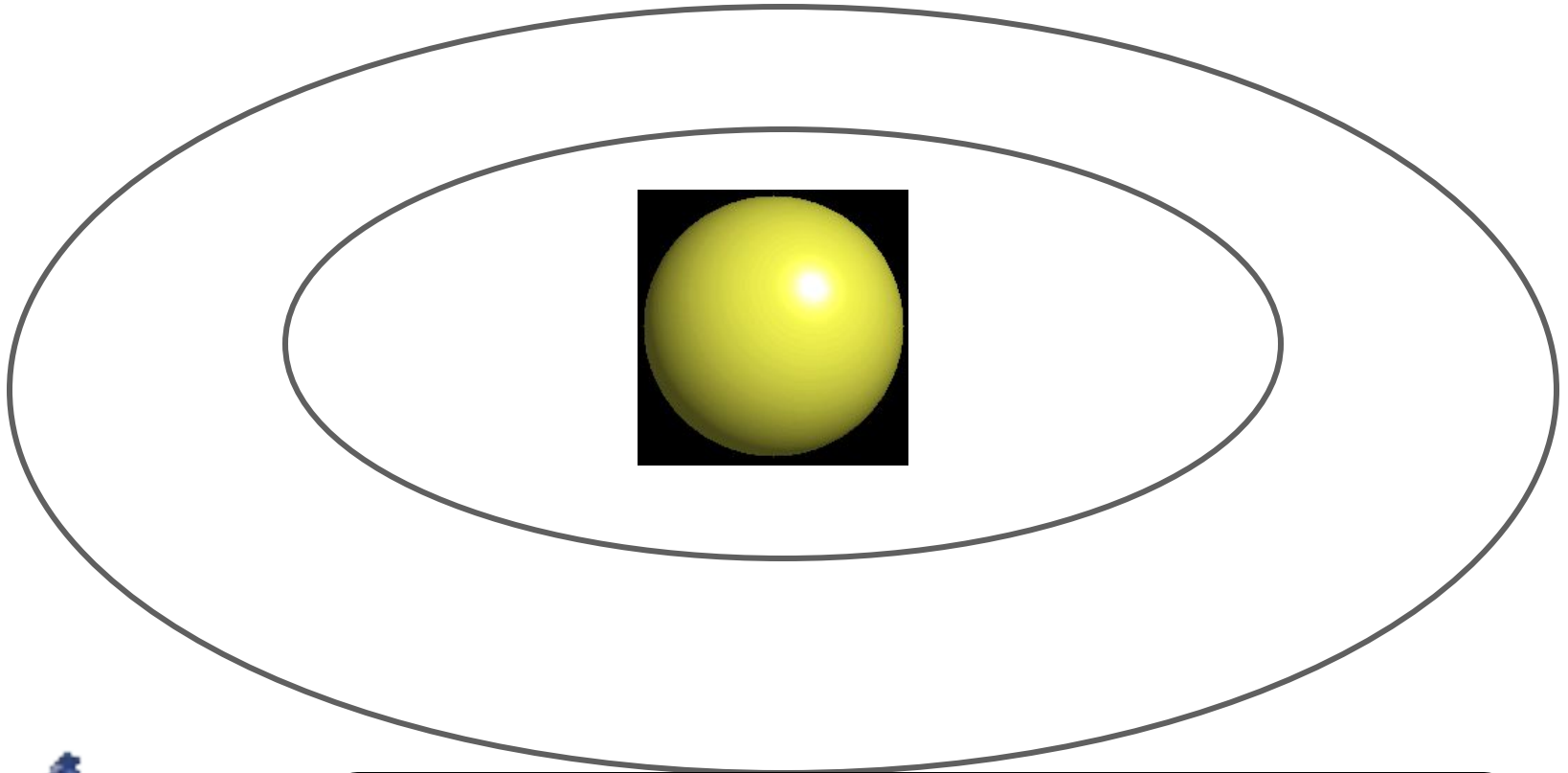
Electricity - electrons moving through a metal wire.



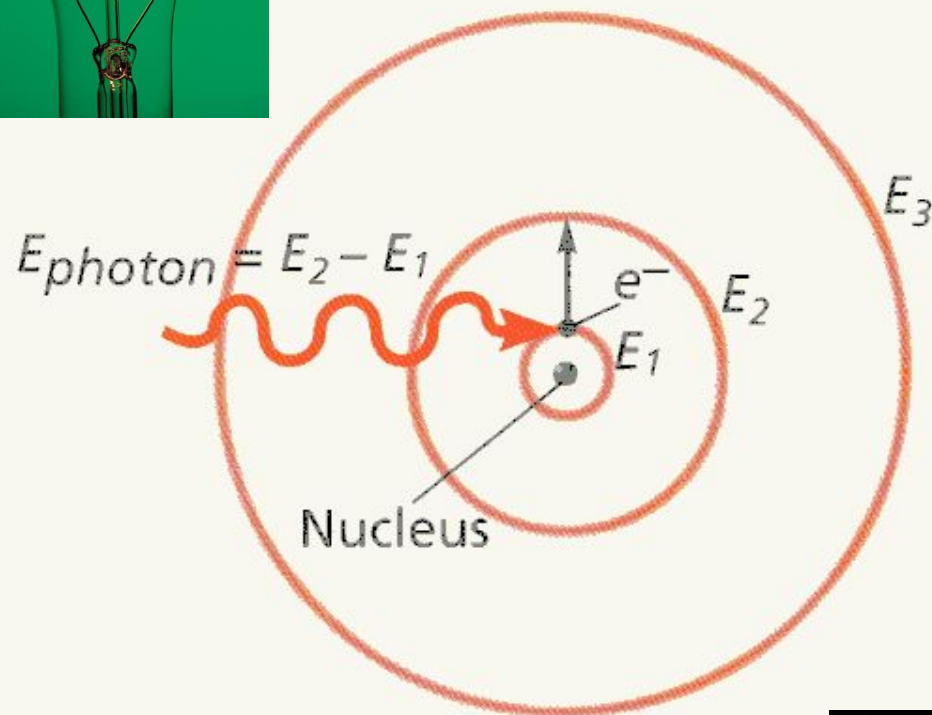
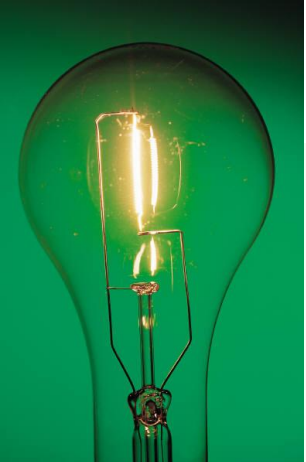
Atomic Absorption



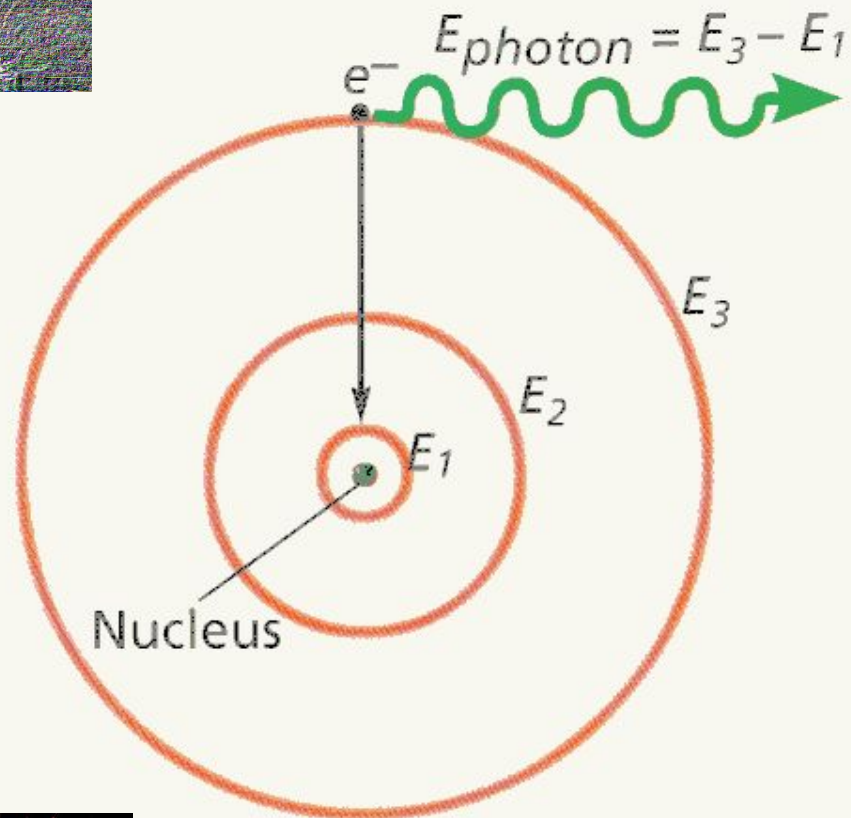
Atomic Emission



**Magic is technology that is
not understood.**

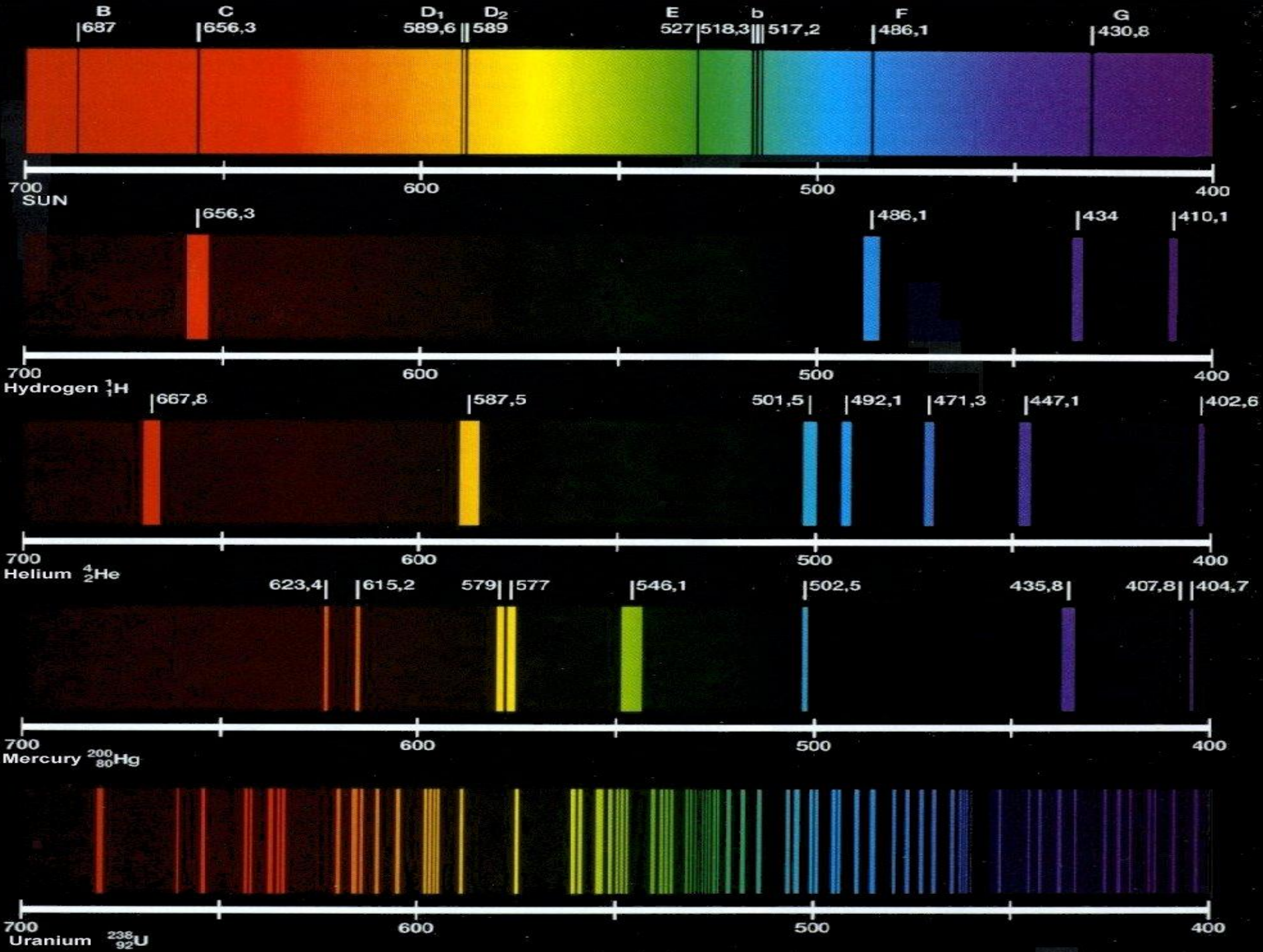


Absorption

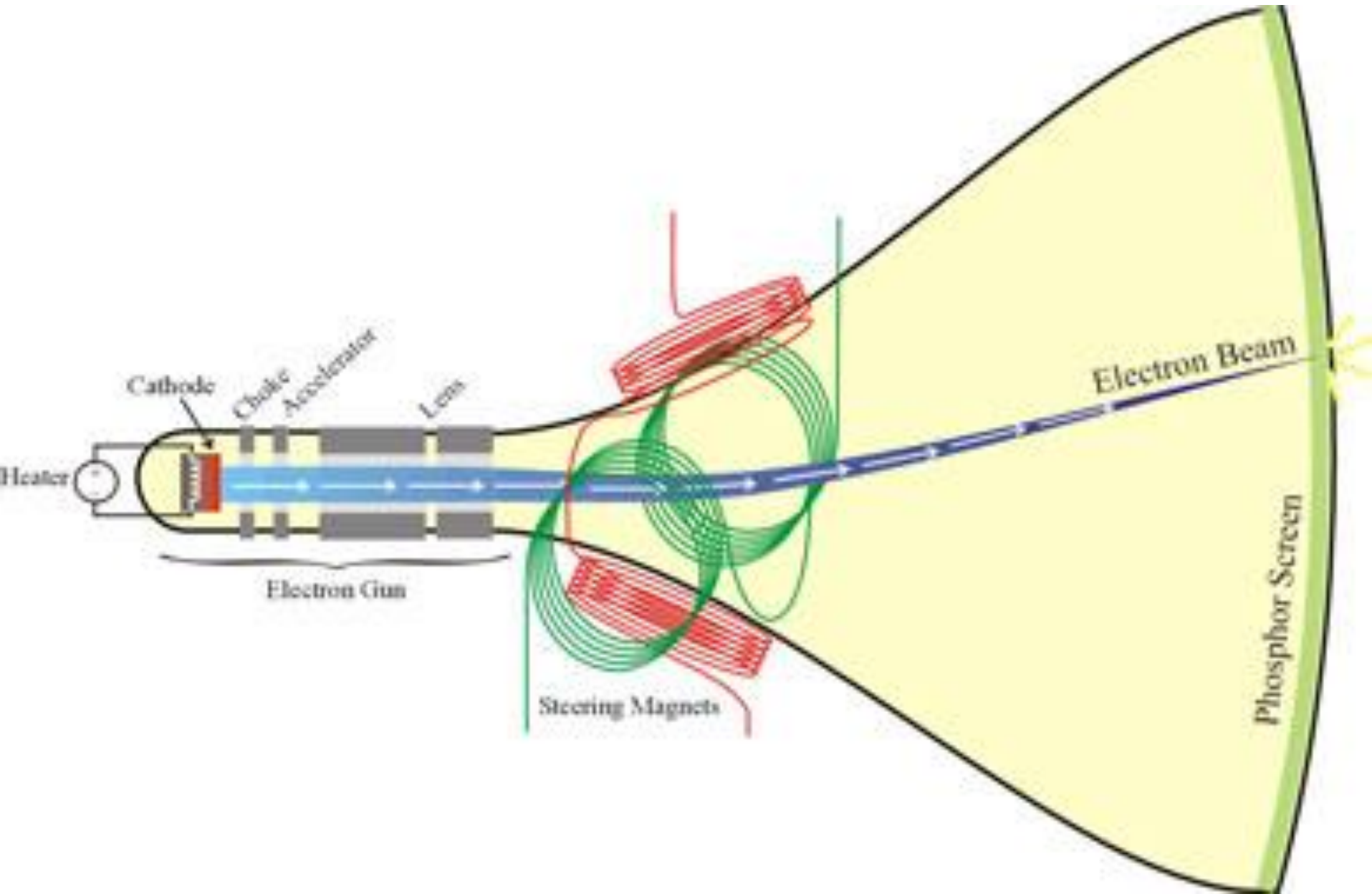


Emission



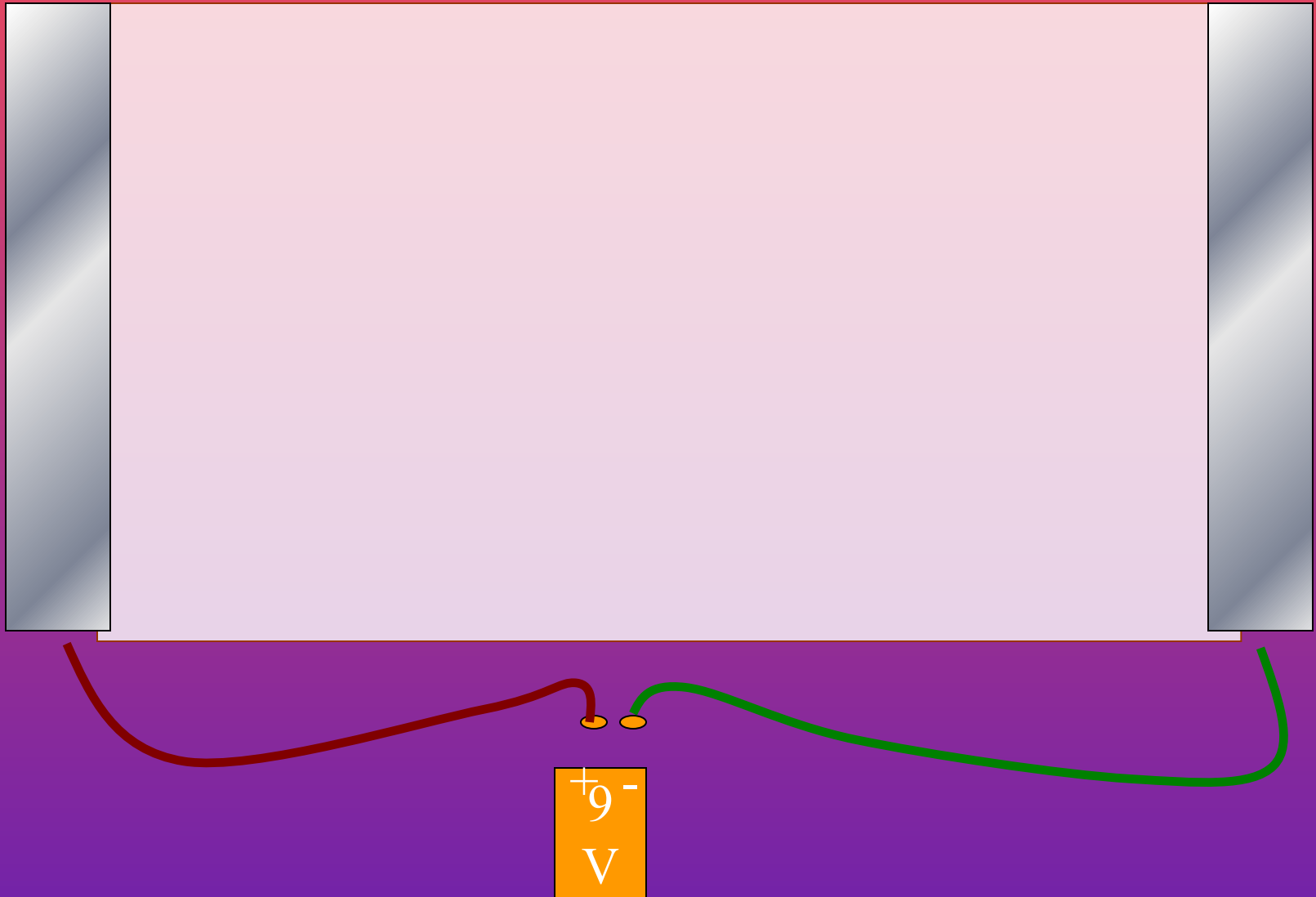


A television is an *Electron Gun*



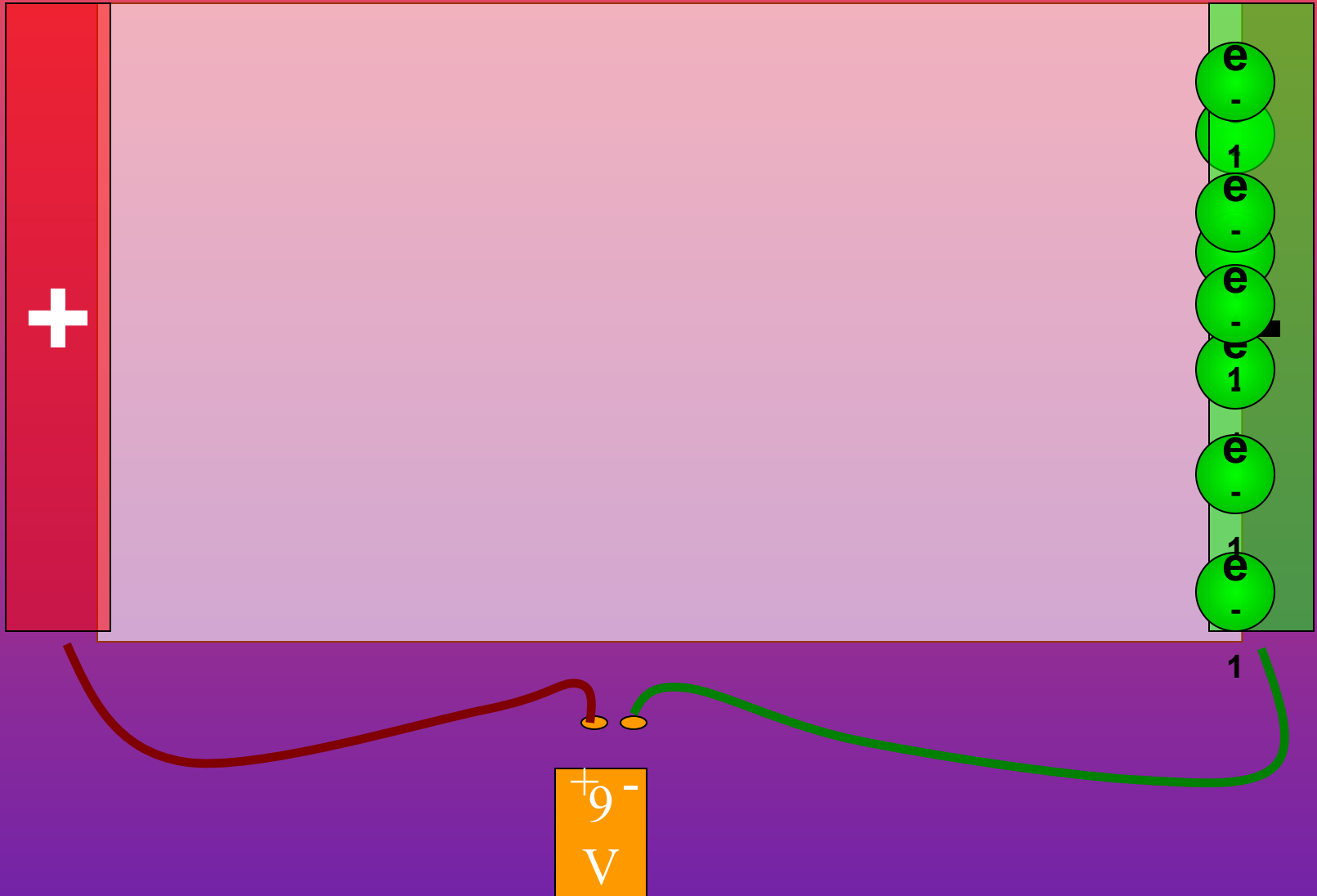
Generating an Electric Field

with dc voltage



Generating an Electric Field

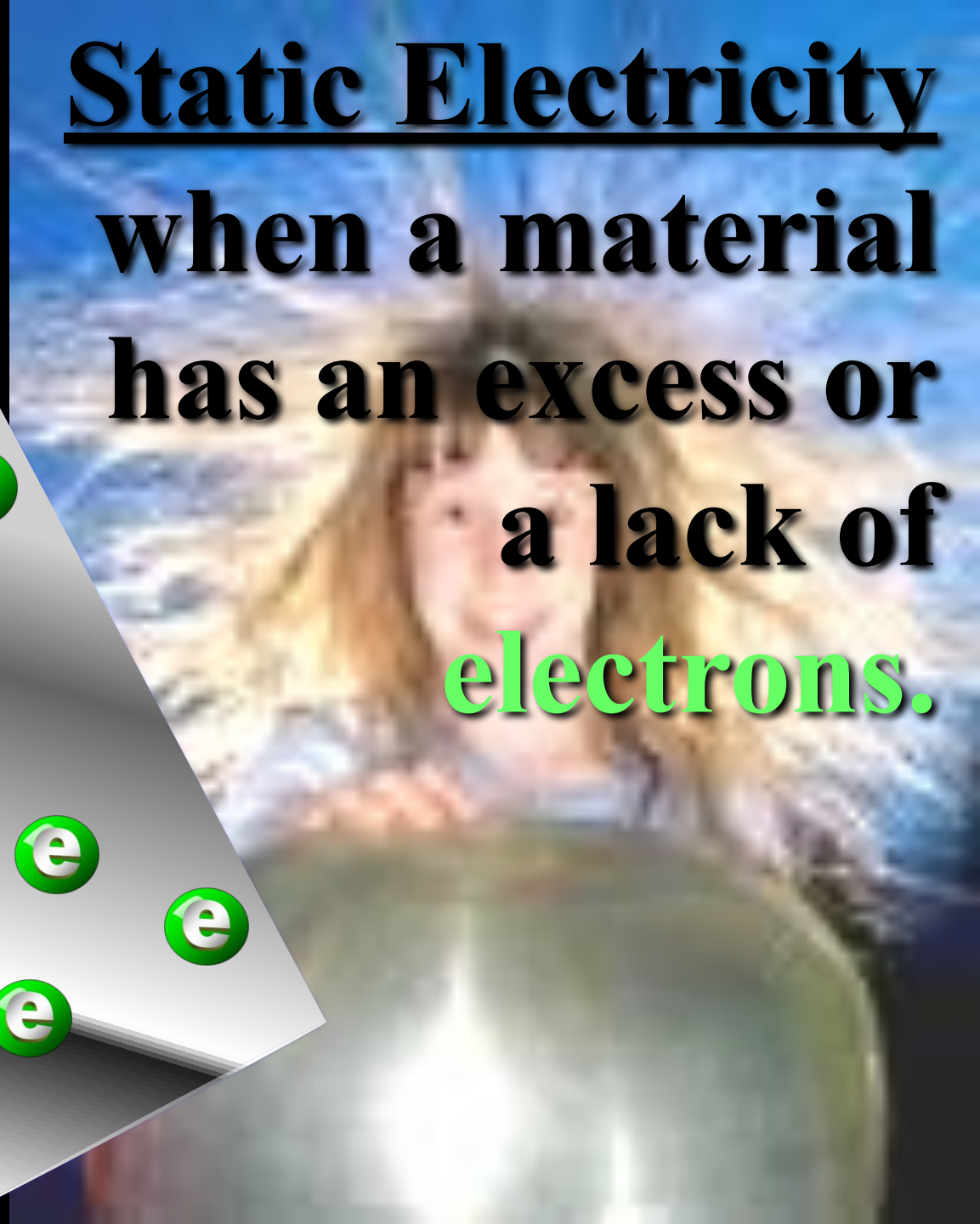
dc voltage



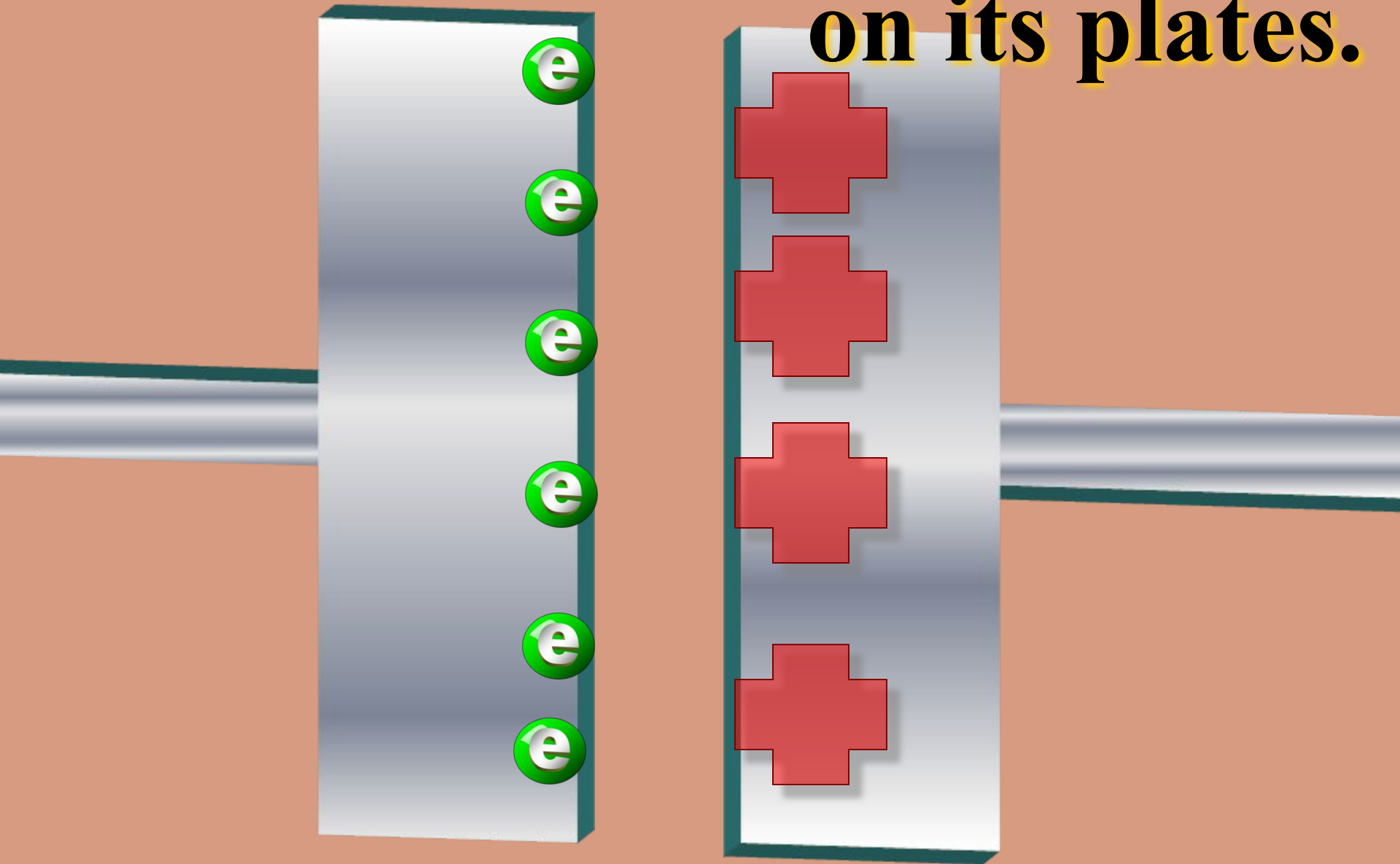
Static electricity



Static Electricity
when a material
has an excess or
a lack of
electrons.



**A Capacitor holds a charge
on its plates.**



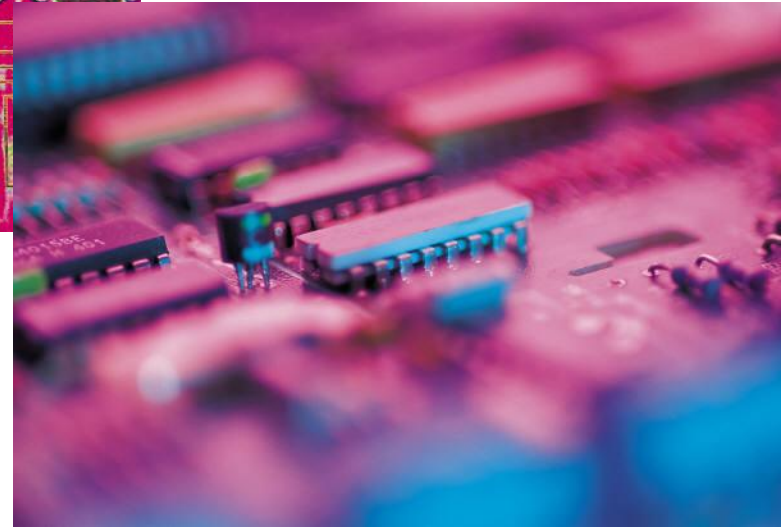
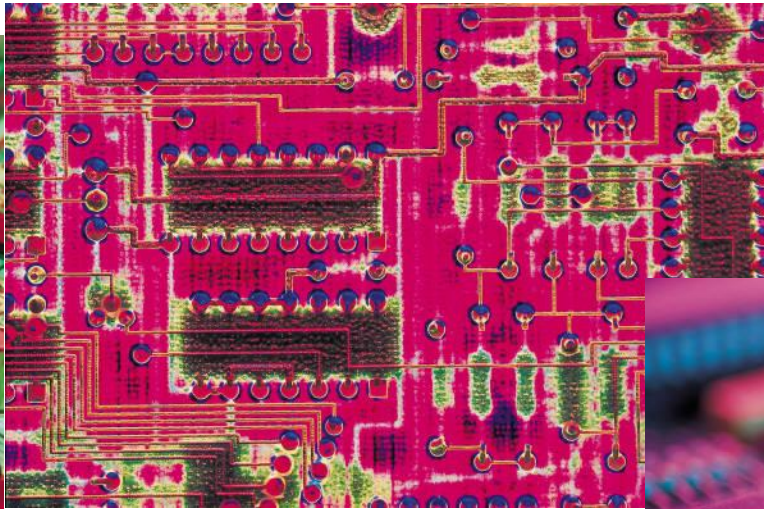
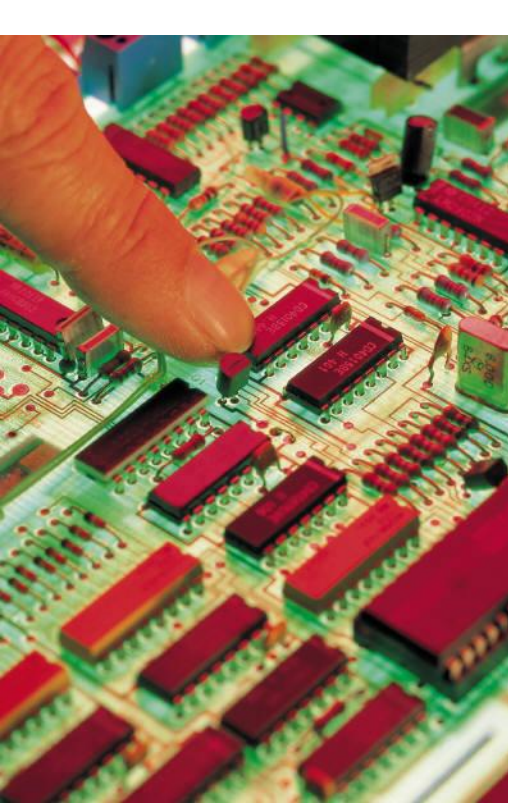
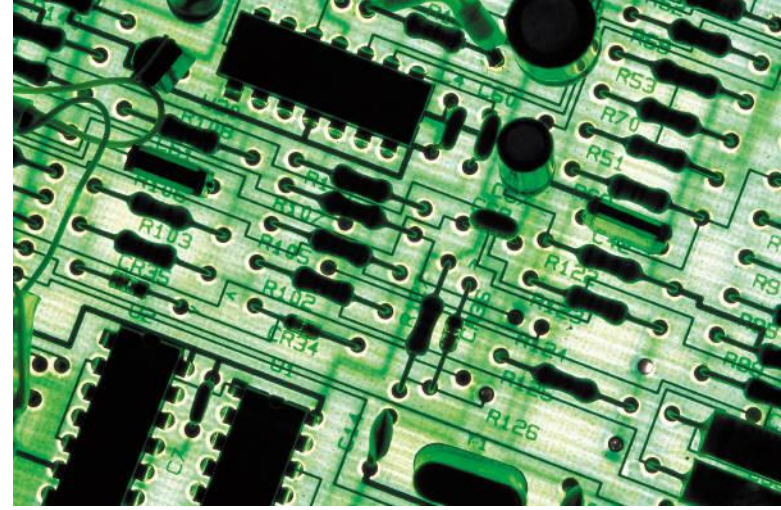
Conductor

Something that allows thermal energy to pass easily

- **Metal**
- **Water**

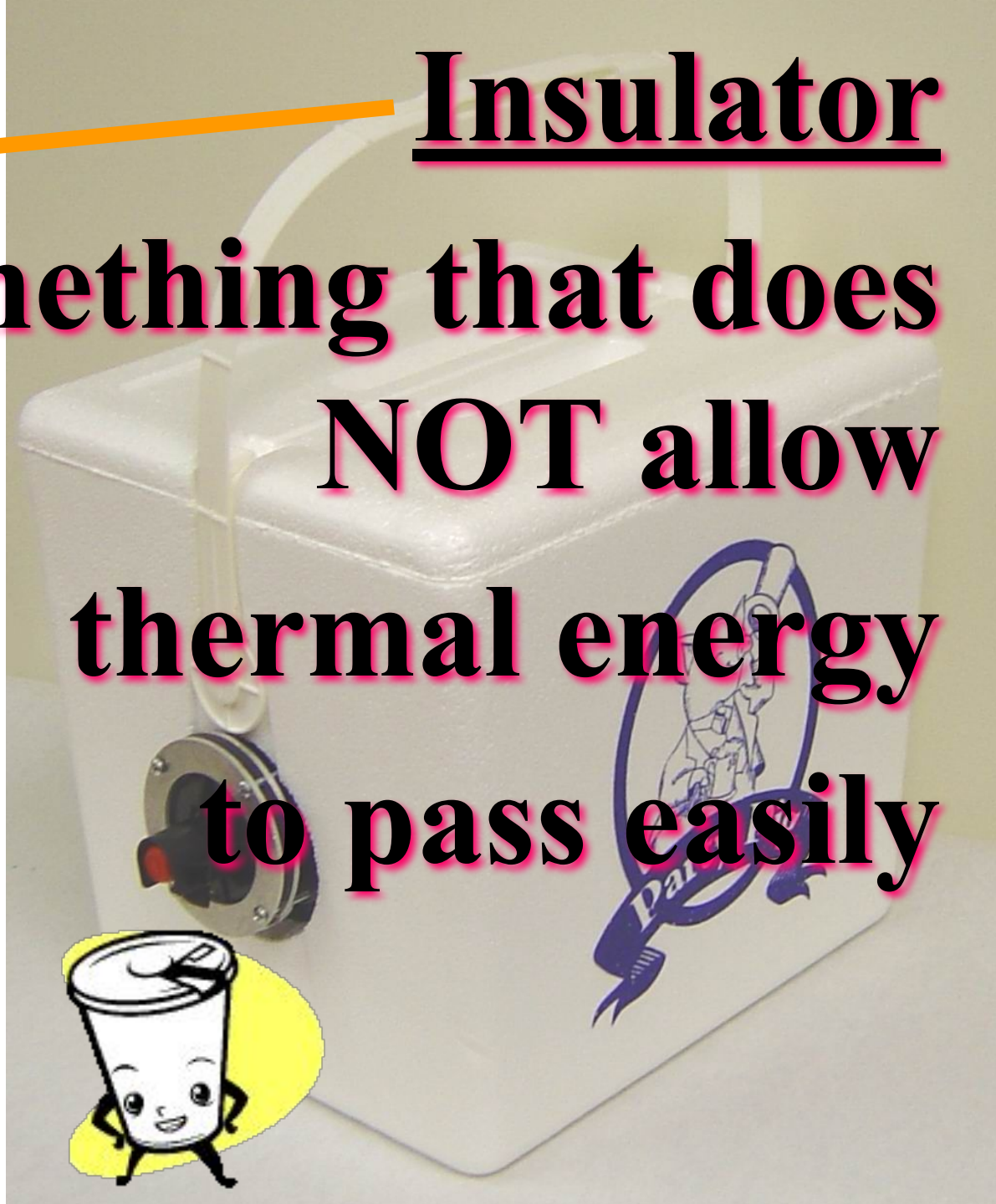


semi-Conductor



Insulator

Something that does
NOT allow
thermal energy
to pass easily



Electrical Energy – is energy resulting from the force between two objects having different voltages.



**Electrical Energy – is the
force of moving
electrons.**



Electrical Energy

Voltage

Current

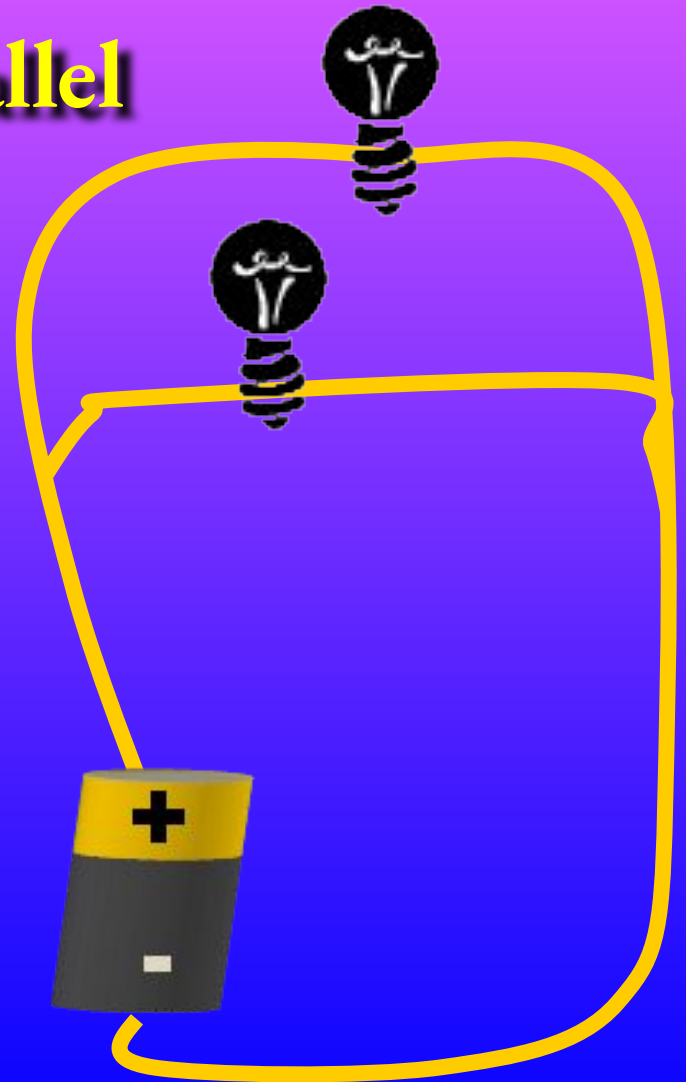
Resistance

Thermocouple
(copper & nickel or
copper & iron)



Circuits

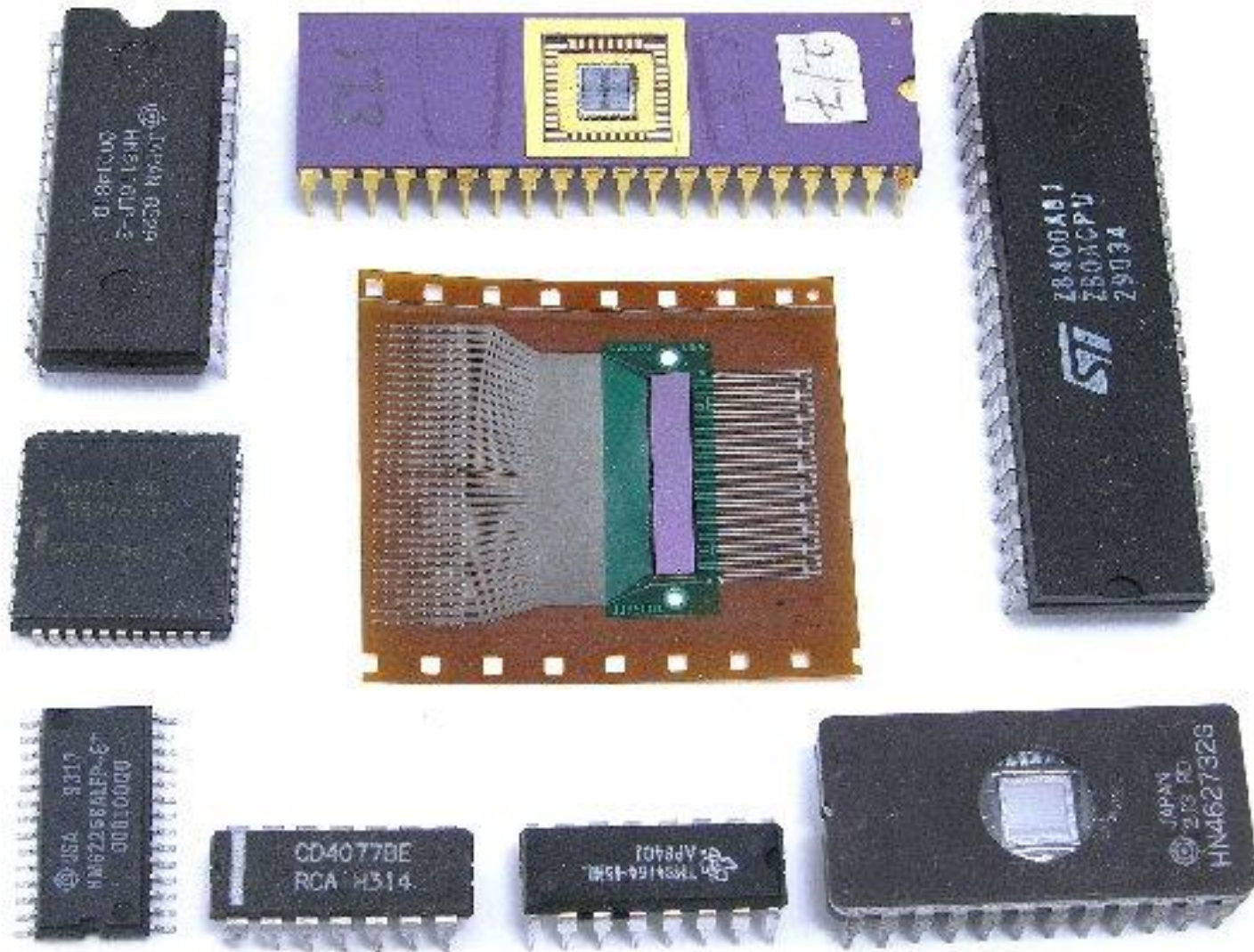
Series Parallel



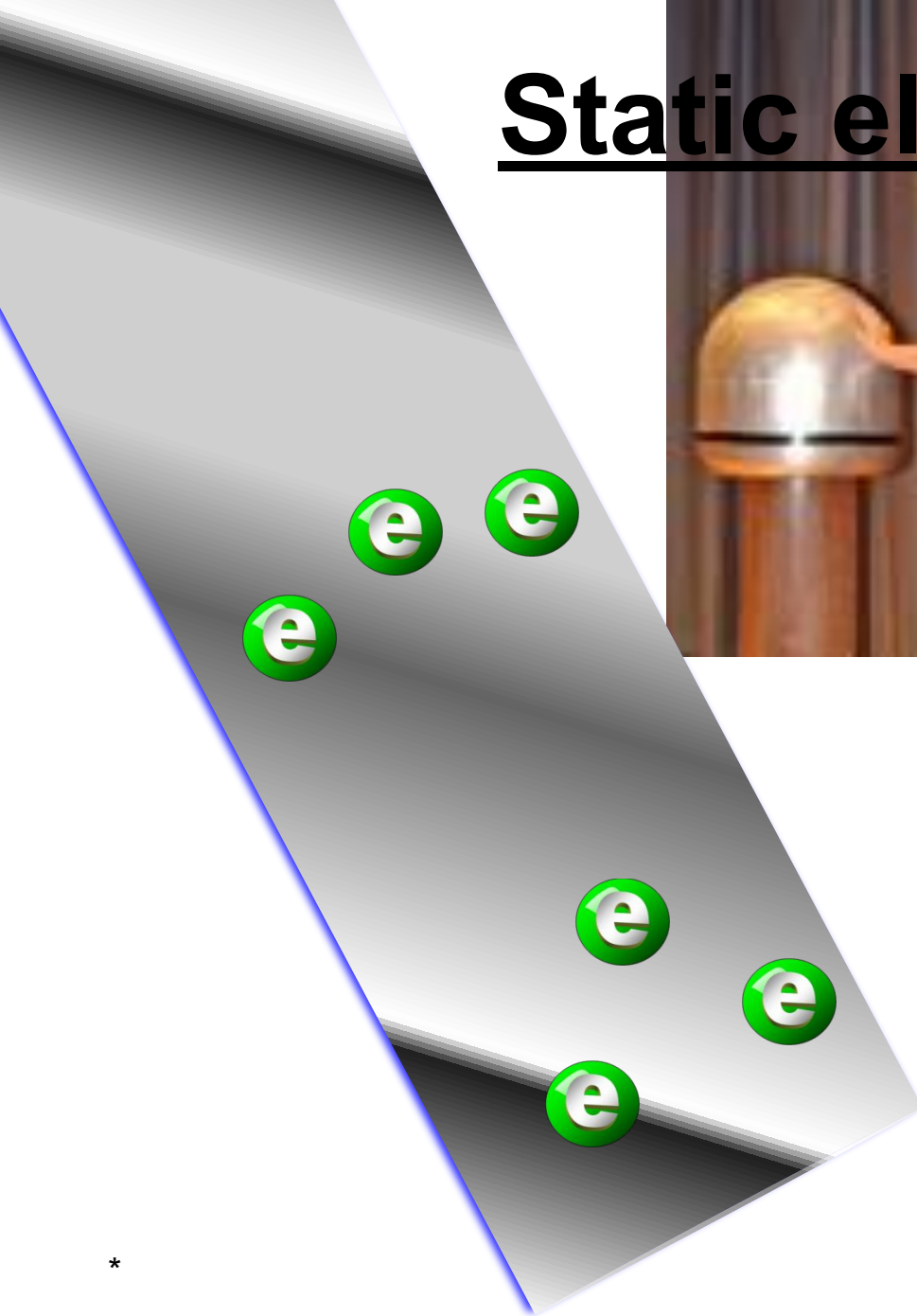
Circuit Board



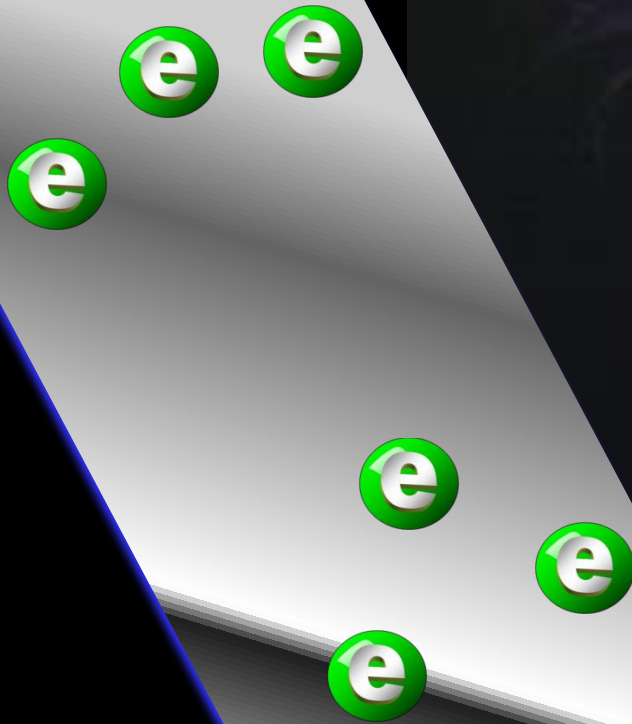
Integrated circuit



Static electricity



Static electricity





Electricity filament

