

Electrical Circuits

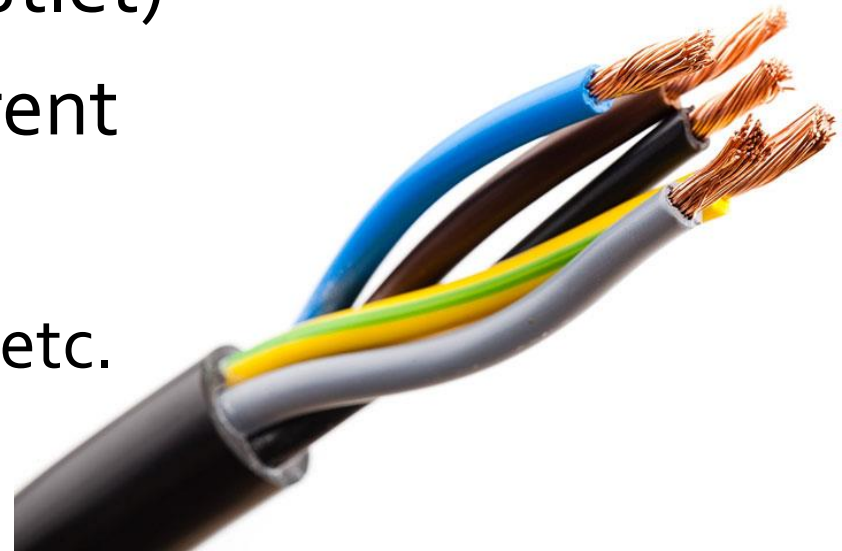
Dynamic Electricity

Dynamic Electricity

- All phenomena related to electrical charges **in motion**. (i.e. flow of charges in a **circuit**)

What is needed?

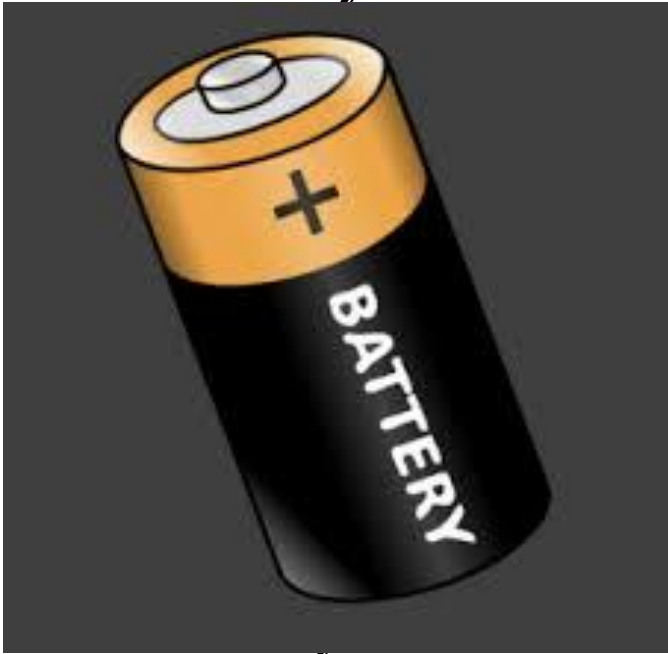
- **Power supply** (battery, outlet)
- **Conductor** of electric current
- **Use for the electricity**
 - light bulb, display, heater, etc.



Power Supply

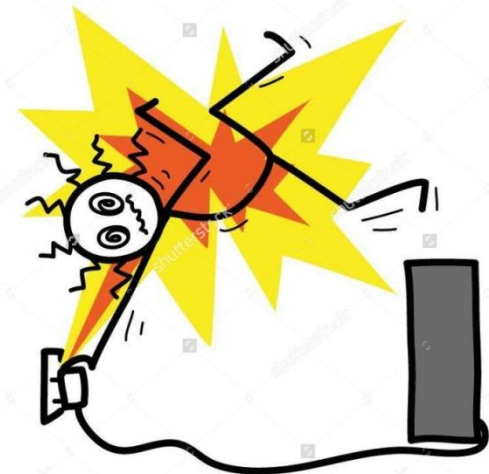


- Battery



Conductors and Insulators

- Conductor: any component that **can transmit** an electric current
- E.g. ???
- Insulator: any component that **prevents** an electric current from flowing
- E.g. ???



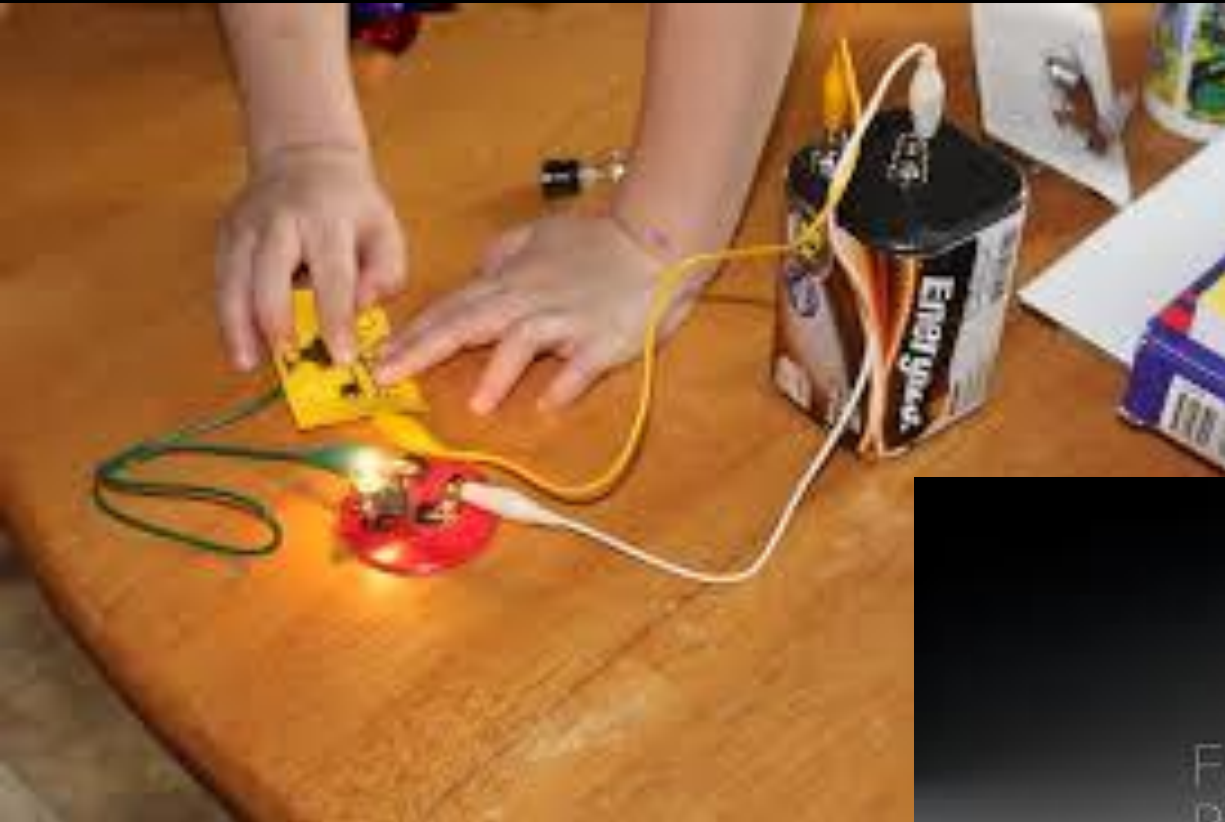
Circuits

Open

No battery

Closed

Circuit



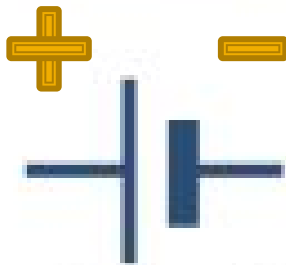
BASIC Components and symbols



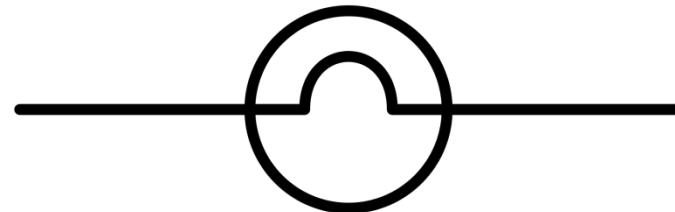
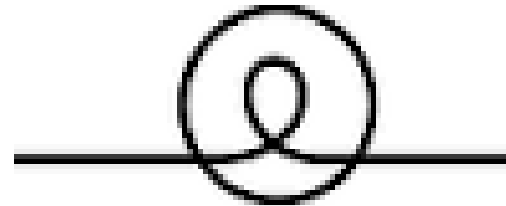
electrical wire



lightbulb



single cell
battery



Circuit Diagrams

