



ELECTRIC COMPONENTS

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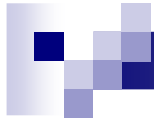


CONDUCTORS & INSULATORS



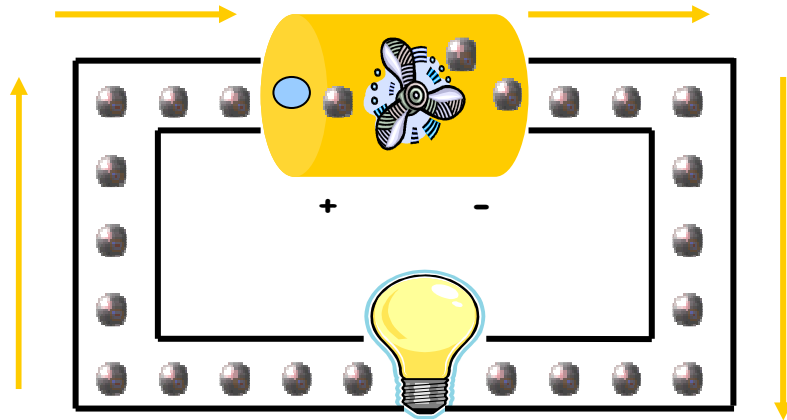
CONDUCTORS & INSOLATORS

- Materials allow electrons pass through them are **CONDUCTORS**, as metals (copper, silver and gold).
- Materials do not allow electrons pass through them are **INSOLATORS**, as plastics, wood or rubber.

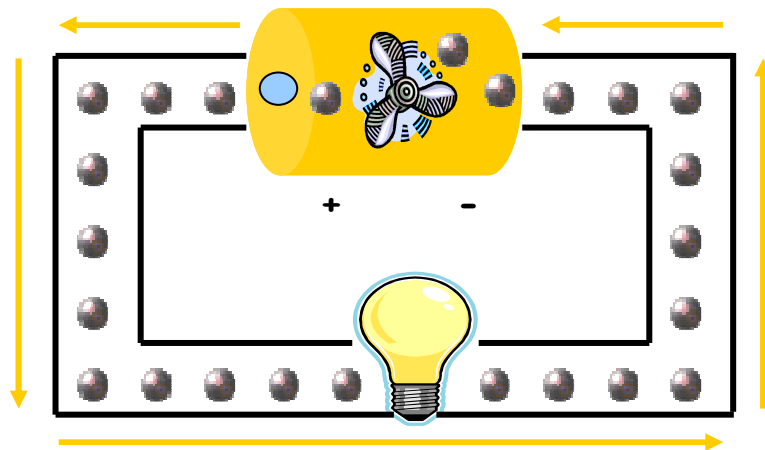


REAL/CONVENTIONAL WAY & DC/AC

Way of electric current

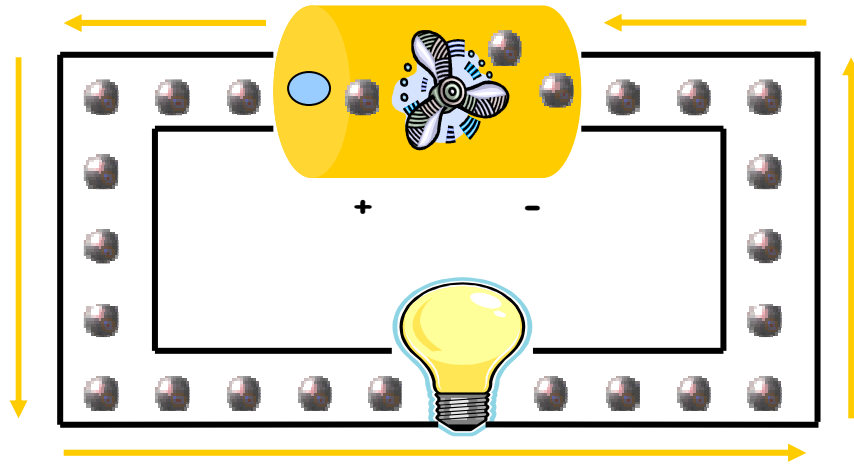


Real way

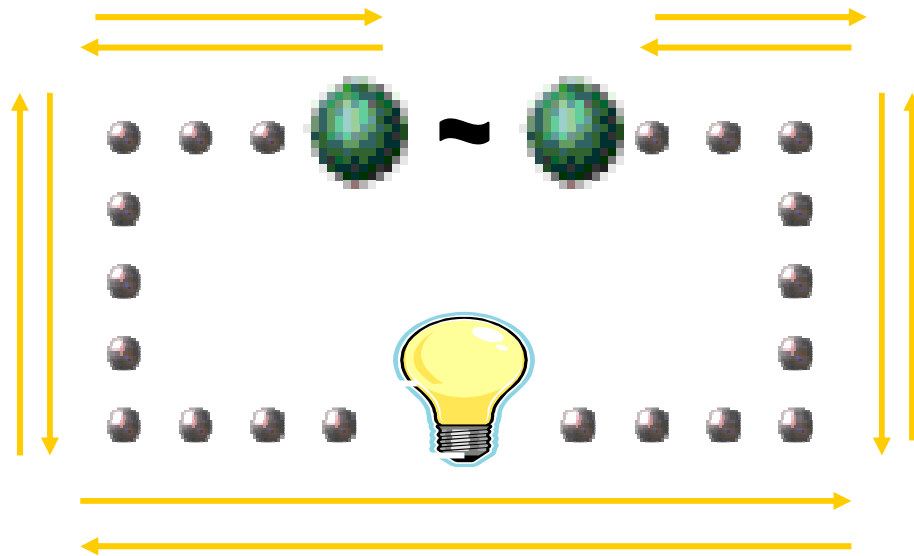


Conventional way

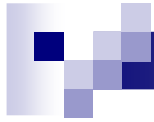
Kinds of electric current



Direct Current (DC)



Alternating Current (AC)




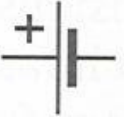

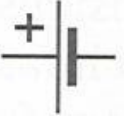

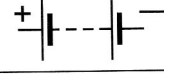


ELECTRIC COMPONENTS





ELECTRIC COMPONENTS

- **Generators:** give electrons energy to flow through a circuit. Two types: DC/AC. E.g: cells, batteries, dynamos.
- **Receivers:** elements that transform electrical energy in another kind of energy that we need. E.g: bulb, hairdryer or T.V.
- **Conductors:** let electrons pass through them from generator to receiver and from receiver to generator. E.g: wires and cables.
- **Controllers:** allow to open or close an electric circuit. E.g: switches, push switches or two-way switches.


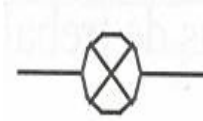

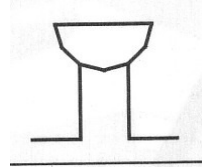

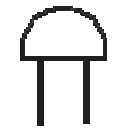
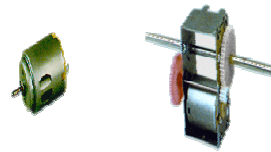

GENERATORS

DC				
Picture	Name	Symbol	Energy transformation	Characteristics
	Cell		Chemical-Electrical	Non-rechargeable
	Accumulator		Chemical-Electrical	Rechargeable
	Battery		Chemical-Electrical	Group of accumulators. Rechargeable.
	Dynamo		Mechanical-Electrical	-



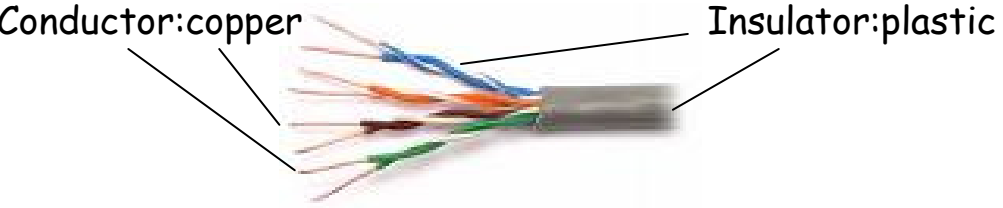
GENERATORS

AC				
Picture	Name	Symbol	Energy transformation	Characteristics
	Alternator		Mechanical- Electrical	Alternators are in power stations. A plug represents the terminals of an alternator


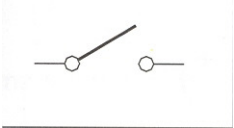

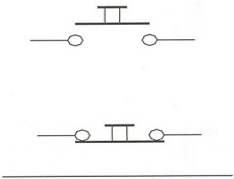
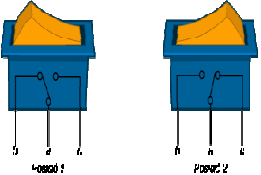
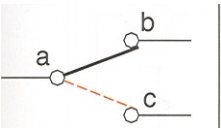
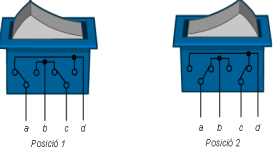
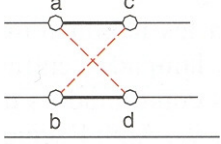
RECEIVERS

Picture	Name	Symbol	Energy transformation
	Bulb		Electrical- Light
	Buzzer		Electrical-Sound
	Bell		Electrical-Sound
	Engine	 <p>Depends on the current</p>	Electrical-Mechanical

CONDUCTORS

Picture	Name	Symbol
	Cables/Wires	
 <p>Conductor:copper</p> <p>Insulator:plastic</p>		

CONTROLLERS

Picture	Name	Symbol	Characteristics
	Switch		1 entry-1 exit
	Push switch NO Push switch NC		1 entry-1 exit
	Two-way switch		1 entry-2 exits
	Double pole switch		2 entries-2 exits