



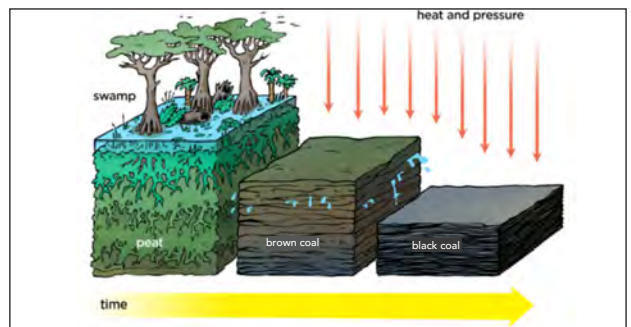
The Sun shines on the Earth



Plants transform light energy from the sun to grow (*Photosynthesis*)



Plants die and sink into the earth, building a thick layer of plant matter



Plant matter is subject to heat and pressure under the surface for millions of years



Over millions of years, plant matter is transformed into coal



Machinery is used at coal mines to dig out the coal



Coal is transported to the power station



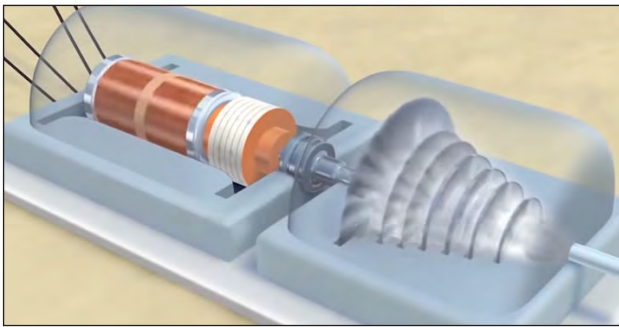
At the power station, coal is crushed into a powder so it can burn faster



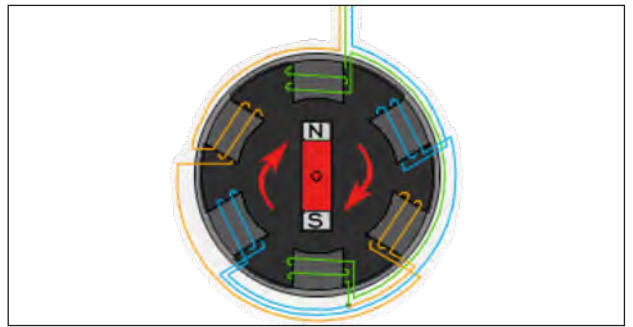
The crushed coal is blown into a furnace and burned at high temperatures



Burning the coal at high temperatures transforms water into steam in pipes



High-pressure steam is blasted through turbines causing them to spin



The spinning turbine turns large magnets within a wire coil, generating electricity



Electricity is transmitted along power lines to homes and buildings



The electricity travels through cables in buildings to point of use



You plug your charger into a power point to charge your phone

CHARGE MY PHONE

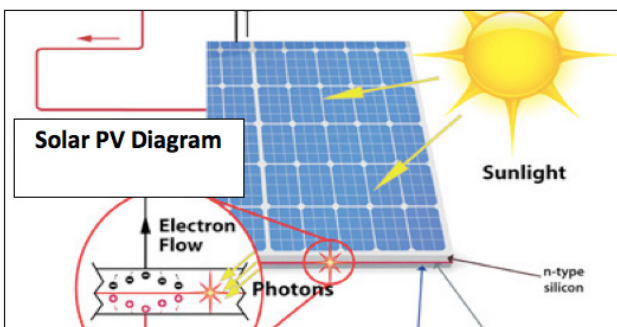
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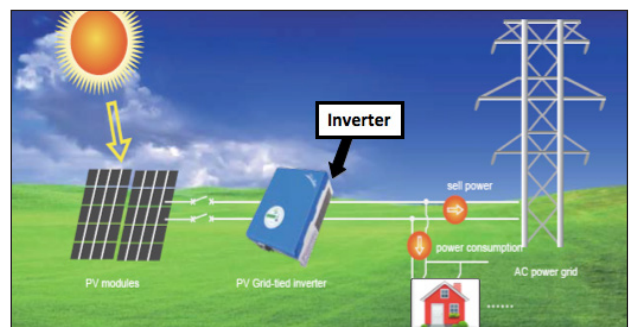
The Sun shines on the Earth



Solar panels transform light energy from the sun into electrical energy



Photons of light from the sun excite electrons inside the solar panels. The electrons move around in a circle generating electricity



The electric energy is directed through an inverter



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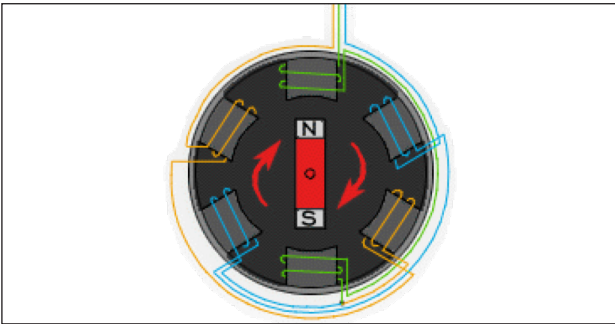
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The wind blows



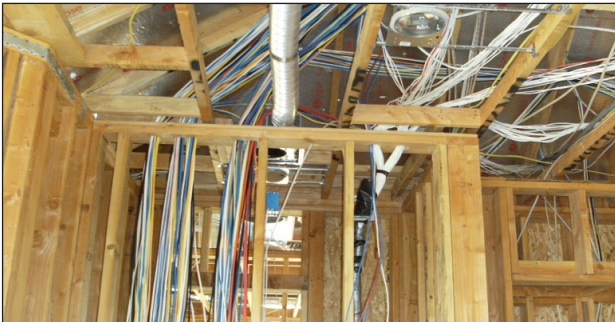
The energy of the wind pushes the blades of a turbine



The spinning turbine turns large magnets within a wire coil, generating electricity



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