













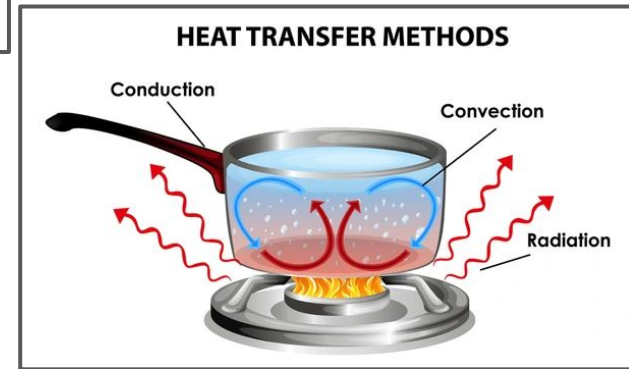
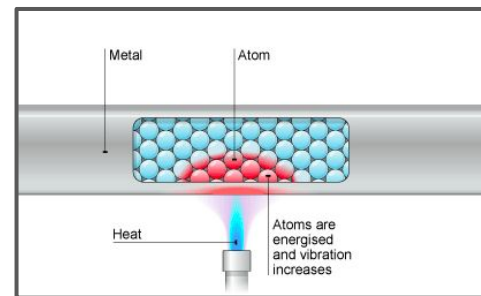
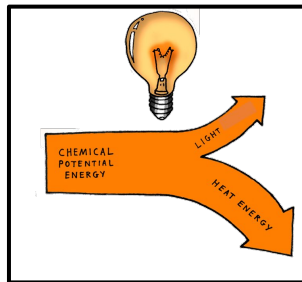
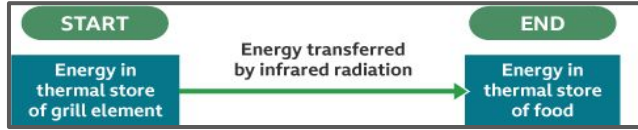
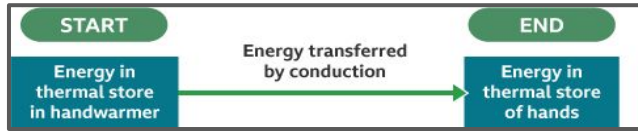
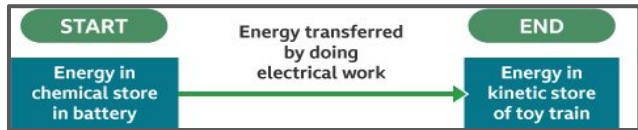
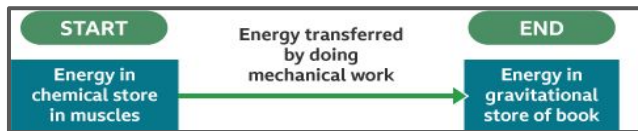
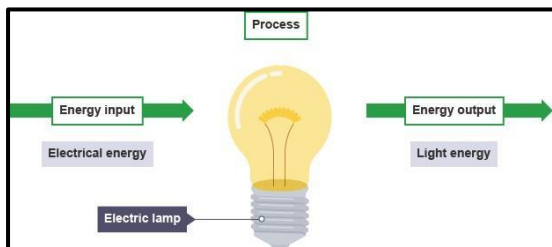
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Physics - Energy



Type of energy	Description	Type of energy	Description
Kinetic 	The energy in moving objects	Thermal (Internal) 	The heat stored in an object
Chemical 	When a substance undergoes a chemical reaction	Gravitational potential 	When an object is raised to a height
Magnetic 	When 2 objects attract or repel	Electrostatic (electrical) 	Allows an electric current to flow
Elastic potential 	When an object is stretched or squashed	Nuclear 	Energy stored in an atom(not needed till GCSE)
Light 	From a bright object (not stored)	Sound 	From a vibrating object (not stored)





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Physics - Energy



Energy Transfer	Changes from one form of energy to another form of energy.
Conduction	Method of transferring heat in solids.
Convection	Method of transferring heat in liquids and gases.
Dissipation	Energy becoming spread out to the stores of surrounding objects
Elastic potential energy	Energy stored in an object that has been stretched
Radiation	Method of transferring heat which does not need particles.
Temperature	A measure of how hot something is.
Thermal conductivity	A measure of how well an object transfers heat.
Thermal energy store	Stored because of the object's temperature.
Work	causes energy to be transferred from one store to another
Energy transfer	Energy moved from one store to another.
Internal energy	Energy stored in the system by particles.
Joule	Unit of energy
Work done	Work is done when a force makes an object move a distance, energy is transferred
Power	The rate of work done. Or The energy transferred per second.
System	Object or group of objects.

Chemical energy	Changed by bonds being made/broken
Kinetic energy	All moving objects have it.
Gravitational Potential energy	Energy stored in objects raised up against the force from gravity (possessed by anything that can fall .)
Thermal Heat	Flows from hot objects to colder objects.
Nuclear store	Energy stored in the nuclei of atoms. Can be released by the fusing or splitting of nuclei.
Magnetic	Two separated magnets that are attracting, or repelling.
Vibrational	Energy from vibrations or moving to and fro

Conservation of Energy	Energy cannot be created or destroyed It can be stored, dissipated or transferred from one form into another.
Lubrication	A method of reducing unwanted energy transfers by application of a lubricant (e.g. oil) to reduce friction . Occurs in machines.
Insulation	A method of reducing energy transfers
Closed system	An isolated system in which no energy transfers take place out of or into the energy stores of the system.
Friction	A contact force resisting the relative motion between two surfaces.
Input energy	Energy supplied to a device.
Useful energy	Energy transferred to where it is wanted in the way it is needed.
Wasted energy	Energy that is not usefully transferred.
Efficiency	The proportion of the total input energy that is transferred in useful ways.