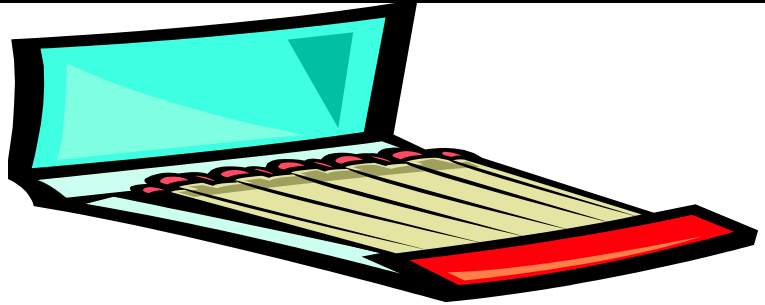
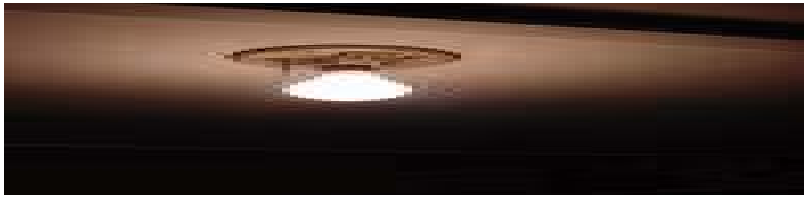
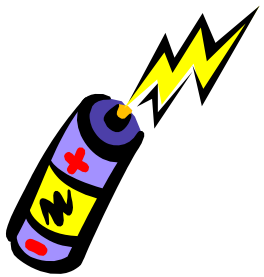
Energy Vocabulary Review

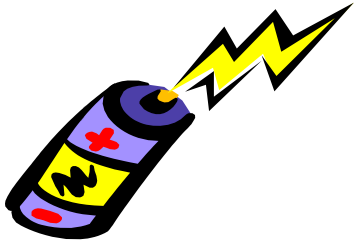
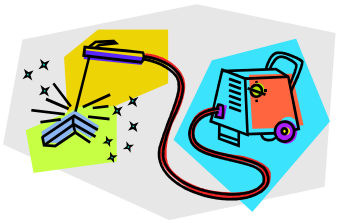
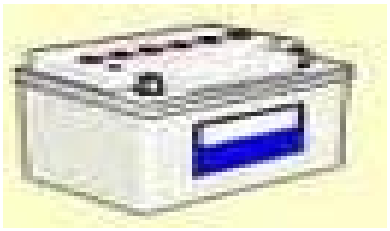
compound machine	**two or more simple machines put together**
conduction	**transfer of heat by direct contact**
convection	**transfer of heat energy by movement of liquid or gas through currents**
distant	**how far an object moves**
electrical energy	**energy that comes from the movement of electrically charged particles**
electrical circuit	**pathway of of wire through which electrons can flow, usually includes battery, switch, and resister (bulb, bell etc.)**
electromagnet	**a magnet that is made by a coil of wire with electricity going through it & wrapped around an iron core**
energy	**ability to do work**
force	**a push or pull that can move an object**
fulcrum	**the point of support of a lever around which it moves**

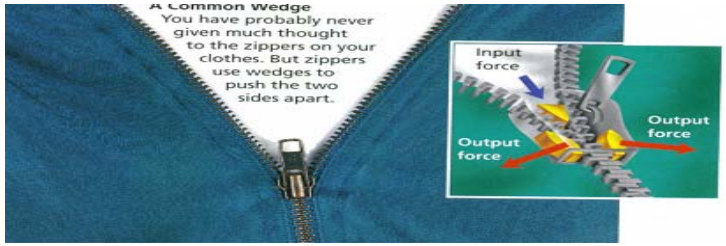
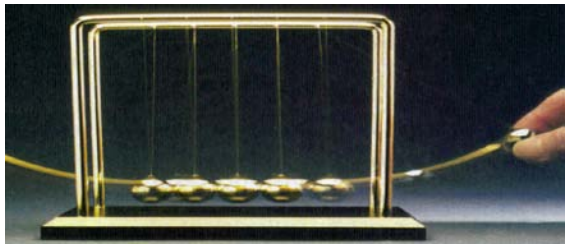
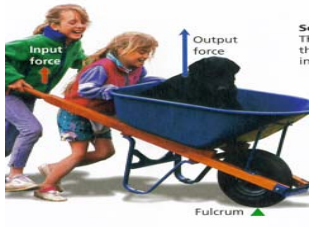
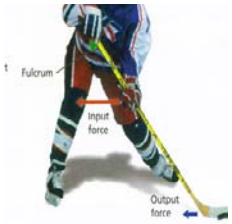
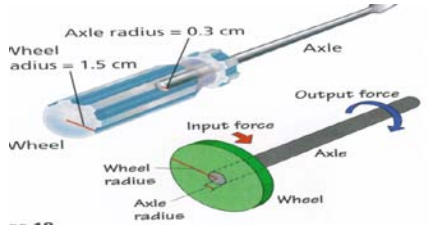
generator	**machine that produces electricity by turning a magnet inside a coil of wire**
heat energy	**energy an object has due to the movement of its molecules**
inclined plane	**simple machine with a sloped surface or ramp**
joule	**unit of energy used to measure work**
kinetic energy	**the energy of an object due to its motion**
Law of Conservation of Energy	**law that states that energy can change form but cannot be created or destroyed**
lever	**simple machine with a long rigid bar that rests on and pivots around a support**
light	**form of energy that travels in waves and is visible by the human eye**
magnetic force	**when two poles repel or attract each other**
magnetism	**force of attraction between an object and a magnet**

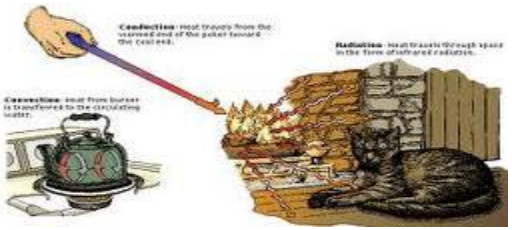
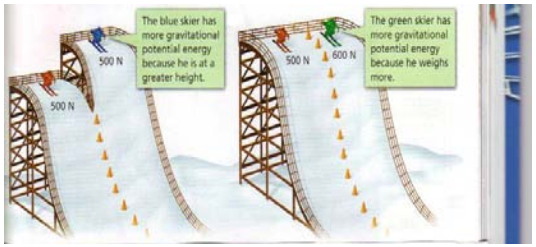
mass	**amount of matter an object contains**
mechanical energy	**energy that an object has because of motion/or position**
Newton (N)	**unit used to measure the strength of force**
potential energy	**energy that an object has stored and can use**
pulley	**simple machine that has a wheel with a rope, chain, or cable wrapped around it**
radiation	**transfer of energy by electromagnetic waves**
screw	**simple machine that has an inclined plane wrapped around a cylinder**
simple machine	**machine that helps people work by reducing the force necessary to move an object**
solar energy	**energy that comes from the sun**
sound energy	**energy that moves through aaspace and produces noise**

spring scale	**tool used to measure weight or force in Newtons**
technological design	**applies scientific knowledge in order to develop a solution to a problem or to create a product to help meet human needs**
1st step of technological design	**indentify a problem or need**
2nd step of technological design	**design a solution or product**
3rd step of technological design	**implement the design**
4th step of technological design	**evaluate the solution or the product**
wedge	**simple machine that has a moving inclined plane with 1 or 2 sloping sides**
weight	**measurement of the force of gravity on an object**
wheel and axle	**simple machine with a shaft inserted through the middle (like a circular lever)**

	chemical → mechanical → sound → heat → light
	electrical → sound → heat → light
	electrical → heat → light
 	chemical energy
  	mechanical energy

 	**sources of electrical energy**
	**light & heat**
	**heat & light**
	**chemical**
	**solar**

	**wedge**
	**energy can pass from one object to another**
  	**three classes of levers**
	**compound machine**
	**wheel & axle**

	**heat transfer(conduction, convection & radiation)**
	**heat transfer (conduction, convection & radiation)**
	**forms of energy**
	**elastic potential energy**
	**gravitational potential energy**