

Energy Conversion Matrix

FROM TO ⇒ ↓	Thermal	Mechanical	Acoustical	Chemical	Electrical & Magnetic	Electromagnetic Radiation	Nuclear	Elastic	Gravitational
Thermal	<ul style="list-style-type: none"> Heat exchangers Thermal conduction 	<ul style="list-style-type: none"> Steam turbine Heat engines Wind Radiometer 		<ul style="list-style-type: none"> Endothermic reaction "Cold packs" 	<ul style="list-style-type: none"> Thermo-electric effect Thermionic emission 	<ul style="list-style-type: none"> Thermocouple Incandescence 	<ul style="list-style-type: none"> Thermionic emission 		<ul style="list-style-type: none"> Convection Hot air balloon Popcorn
Mechanical	<ul style="list-style-type: none"> Refrigerator Heat pump Brakes 	<ul style="list-style-type: none"> Gear box 			<ul style="list-style-type: none"> Wind turbine Generator Microphone 	<ul style="list-style-type: none"> X-ray tube 		<ul style="list-style-type: none"> Wishbone Inflating a balloon 	<ul style="list-style-type: none"> Pendulum B-ball pop fly
Chemical	<ul style="list-style-type: none"> Furnace Combustion Exothermic reaction "Hot packs" 	<ul style="list-style-type: none"> Combustion engines Muscle action Dynamite 	<ul style="list-style-type: none"> Chemical explosion 	<ul style="list-style-type: none"> Glycolysis ADP to ATP AMP to ADP 	<ul style="list-style-type: none"> Fuel cell Chemical battery 	<ul style="list-style-type: none"> Bio-luminescence Chemical lasers Fireflies Glowsticks 		<ul style="list-style-type: none"> Combustion expanding gas 	<ul style="list-style-type: none"> Rocket
Electrical & Magnetic	<ul style="list-style-type: none"> Electric heater Toaster 	<ul style="list-style-type: none"> Motor Thunder 		<ul style="list-style-type: none"> Electrolysis Electroplating Rechargeable batteries 	<ul style="list-style-type: none"> Transformer 	<ul style="list-style-type: none"> Lamp LED Radio broadcast 		<ul style="list-style-type: none"> Electrostriction Magnetostriction 	<ul style="list-style-type: none"> Elevator
Electromagnetic Radiation	<ul style="list-style-type: none"> Solar collector Microwave oven 	<ul style="list-style-type: none"> Photoelectric effect 		<ul style="list-style-type: none"> Plants Photography Sunburn 	<ul style="list-style-type: none"> Solar cell 	<ul style="list-style-type: none"> Photo-luminescence 			<ul style="list-style-type: none"> Microwave popcorn
Nuclear	<ul style="list-style-type: none"> Nuclear bomb Fission reactor 	<ul style="list-style-type: none"> Nuclear bomb 	<ul style="list-style-type: none"> Nuclear bomb 	<ul style="list-style-type: none"> Nuclear bomb 	<ul style="list-style-type: none"> Nuclear bomb Nuclear generator 	<ul style="list-style-type: none"> Nuclear bomb Stars 	<ul style="list-style-type: none"> Nuclear bomb Breeder reactor 		<ul style="list-style-type: none"> Nuclear propulsion
Elastic	<ul style="list-style-type: none"> Compression of gas refrigerator 	<ul style="list-style-type: none"> Spring driven wristwatch Bow & arrow 			<ul style="list-style-type: none"> Peizo-electric effect 	<ul style="list-style-type: none"> Peizo-luminescence 		<ul style="list-style-type: none"> Newton's cradle 	<ul style="list-style-type: none"> Trampoline Toaster
Gravitational	<ul style="list-style-type: none"> Contraction of a protostar 	<ul style="list-style-type: none"> Flowing water Pendulum 			<ul style="list-style-type: none"> Hydropower 		<ul style="list-style-type: none"> Formation of a neutron star 	<ul style="list-style-type: none"> diving board 	<ul style="list-style-type: none"> One period of satellite orbit