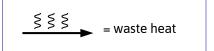
EXAMPLE ENERGY TRANSFORMATION DIAGRAMS



Fuel in a power plant creating moving steam

Chemical Energy (coal)
Thermal Energy (water heating making steam)
Mechanical Energy (steam moving)

Sun heating the ground then heating the air, making wind

Wind to electricity in a wind turbine

Mechanical Energy (moving air)

Mechanical Energy (rotating blades, gears, shaft, etc.)

Electrical Energy (generator)

Sun to electricity (photovoltaic)

Nuclear Energy (fusion) S S Radiant Energy (visible and UV waves) S Electrical Energy (via solar or photovoltaic panel)

Sun to plants growing

Nuclear Energy (fusion) S S Radiant Energy (visible light waves) S S Chemical Energy (photosynthesis—light waves to sugar)

Rechargeable battery being charged and then running a portable game system

Electrical Energy (from the wall socket) $\stackrel{\lessgtr}{\longrightarrow}$ Chemical Energy (chemistry of the battery stores electricity) $\stackrel{\lessgtr}{\Longrightarrow}$ Electrical Energy (Chemical reaction transformed to electricity)

There are many, many more. Once you get the hang of it, you can envision the energy transfers taking place all around you. See if your students can come up with some of their own.