

Possible Responses for Everyday Energy Interactions

(Students may include additional details and/or show activities as a series of interactions – this is a guide; accept reasonable answers.)

Energy Source	Form(s) of Energy	Energy Receiver	Form(s) of Energy
power plant	→ decrease in electrical energy	vacuum	→ increase in mechanical/motion energy (sucking and sound) → increase in heat
power plant or battery	→ decrease in electrical or chemical energy	game	→ increase in motion/mechanical (sound) → increase in radiant energy (light) → increase in heat
hockey player	→ decrease in chemical energy	skate / ice / puck	→ increase in mechanical/motion energy (movement and sound) → increase in heat (ice melts)
battery	→ decrease in chemical energy	bat / ball	→ increase in mechanical/motion energy (movement and sound) → increase in heat
power plant	→ decrease in electrical energy	fountain/cooler/water	→ increase in mechanical/motion energy (movement and sound) → increase in heat → increase in chemical
person or could start with scissors	→ decrease in chemical energy	scissors/newspaper	→ increase in mechanical/motion energy (movement and sound) → increase in heat
cordless drill	→ decrease in chemical energy (battery)	screw / wood	→ increase in mechanical/motion energy (movement and sound) → increase in heat
basketball player	→ decrease in chemical energy	floor/ball	→ increase in mechanical/motion energy (movement and sound) → increase in heat
wood	→ decrease in chemical	environment/skewer / marshmallow	→ increase in radiant → increase in thermal
power plant	→ decrease in electrical	hair / hair dryer	→ increase in mechanical/motion energy (air movement and sound) → increase in heat
oven	→ decrease in electrical	bread	→ increase in thermal → increase in chemical
sun	→ decrease in radiant, thermal, and gravitational potential	water warming up and falling from shower	→ increase in thermal → increase in mechanical/motion
sun	→ decrease in thermal and radiant	clothes	→ increase in thermal
slingshot	→ decrease in elastic (stored mechanical) energy	shot / cans	→ increase in mechanical/motion → increase in thermal