

### ENERGY TRANSFORMATION QUESTIONS

1. Write the energy transformation equation for the following:

- (a) a battery powered portable flashlight
- (b) an electric drill with a rechargeable battery
- (c) fireworks exploding
- (d) an arrow is shot horizontally off a bow and flies through the air
- (e) a camper raises an axe to chop a chunk of wood
- (f) a lawnmower with a gasoline engine cuts a lawn
- (g) a hotdog is grilled on a gas barbecue

2. Come up with an energy transformation that you experience in everyday life where sound energy is the final product.

3. Give an example of each of the following energy transformations

- (a) electrical energy -----> thermal energy
- (b) kinetic energy -----> sound energy
- (c) gravitational potential energy -----> elastic potential energy
- (d) chemical potential energy -----> thermal energy -----> kinetic energy
- (e) electrical energy -----> kinetic energy + thermal energy + sound energy