

# Conservation of Energy and Energy Conversions

The forms of energy you should think about are: Chemical - in food and fuels, Mechanical, Thermal, Electrical, Electromagnetic which includes light, Nuclear, and GPE gravitational potential energy.

Example: You hitting a baseball. You get your energy from food, that is chemical, you change that energy to mechanical when you and the baseball move. So the energy conversion would be: Chemical to mechanical

1. An electric blanket warms a bed on a chilly night.  
Electrical to
2. A rock in Death Valley, California, becomes hot during a summer afternoon.  
to
3. A deputy sheriff rides a horse while directing traffic.  
to
4. A chandelier brightens a ballroom after a waiter moves a switch.  
to
5. A swallow sitting on a fence sings a song for anyone who will listen.  
to
6. A jet plane rapidly accelerates on the runway.  
to
7. A walnut falls to the ground from a lofty branch on a walnut tree.  
to
8. A placekicker sends a football through the uprights of a goalpost.  
to
9. A base runner slides safely into third base.  
to
10. A nuclear powered submarine transports its crew from New Orleans to Mobile.  
to