

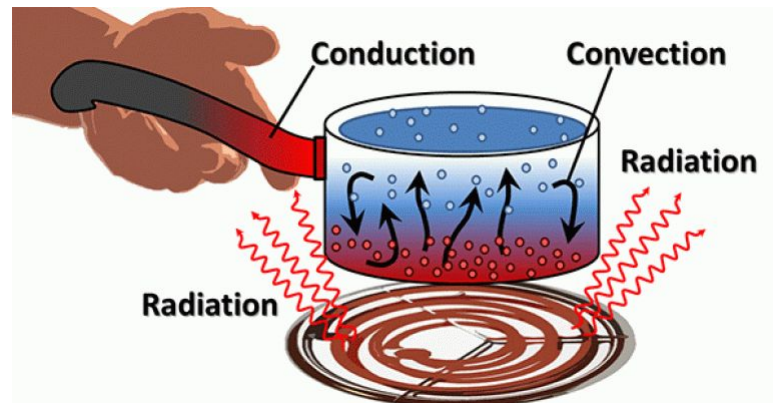


Unit 2 - Energetics and Gas Laws

- *Section 1 - Energy
Transfer and Forms of
Energy*
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ENERGY TRANSFER

- Energy transfer is used to describe the transferring or movement of energy from one object to another
- Energy transfer can occur in three different forms:
 - Conduction
 - Convection
 - Radiation



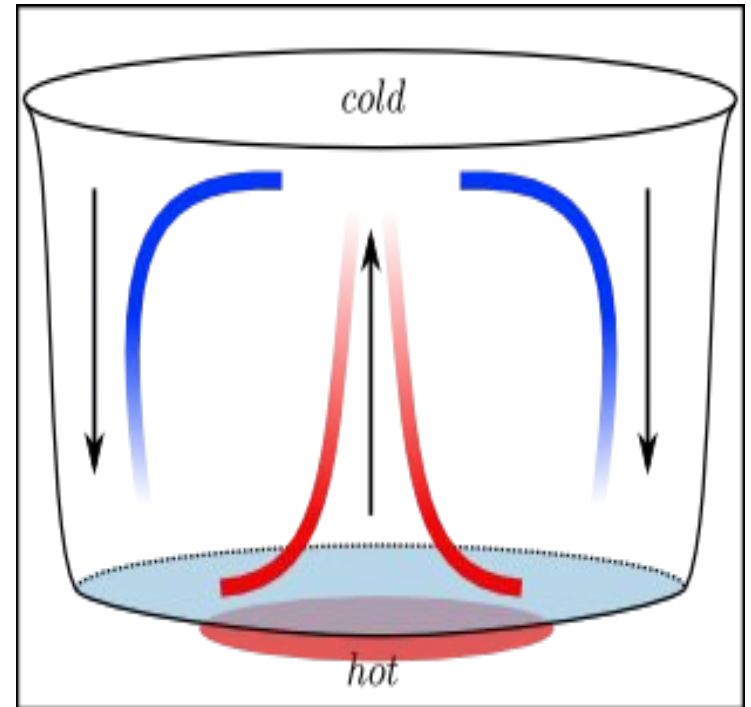
Conduction

- The **direct transfer** of energy from one object to another
 - Two objects are in **direct contact** with each other



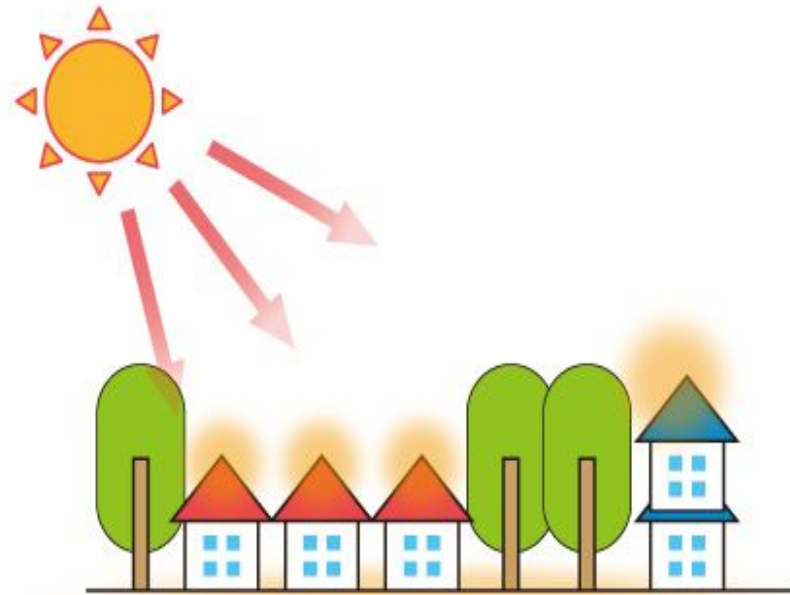
Convection

- Energy transfer occurs in the **presence of fluids or gases** through currents
 - Cooler fluids/gases move towards the bottom of an object, hotter fluids/gases move towards the surface



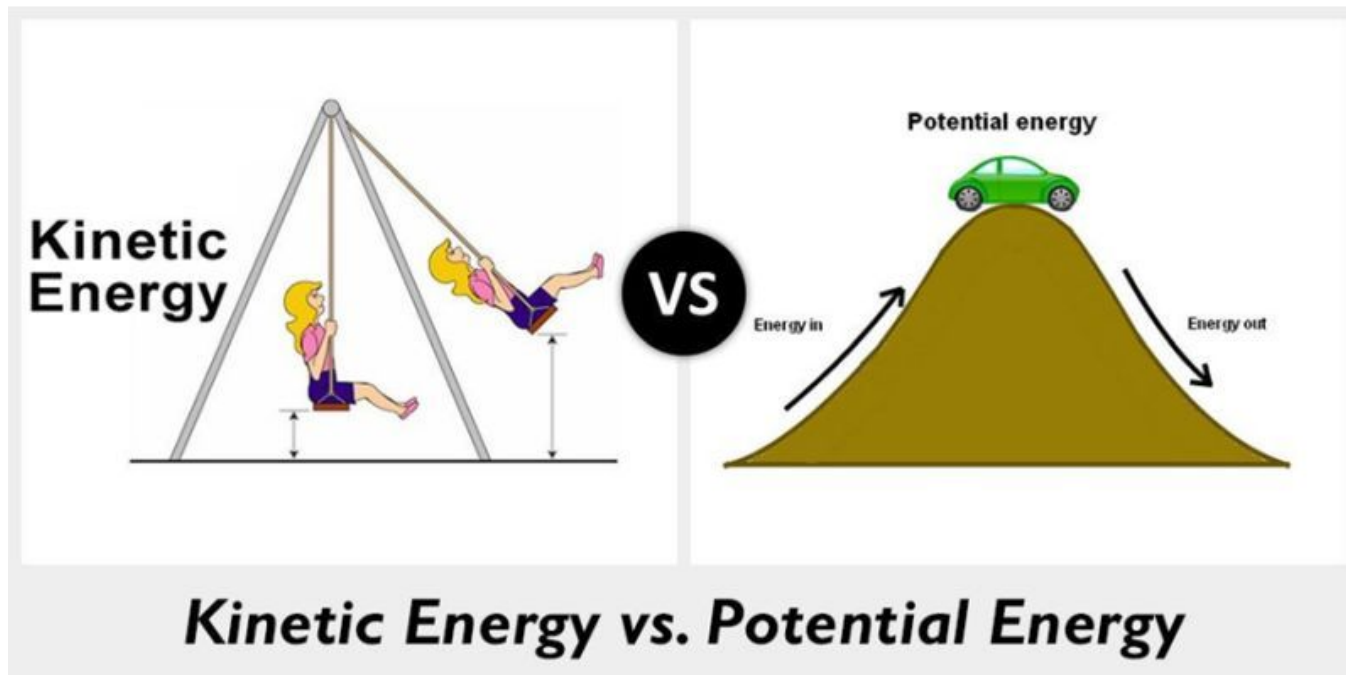
Radiation

- **Transfer of energy through electromagnetic waves**
 - **Direct contact is not needed** for this method of energy transfer

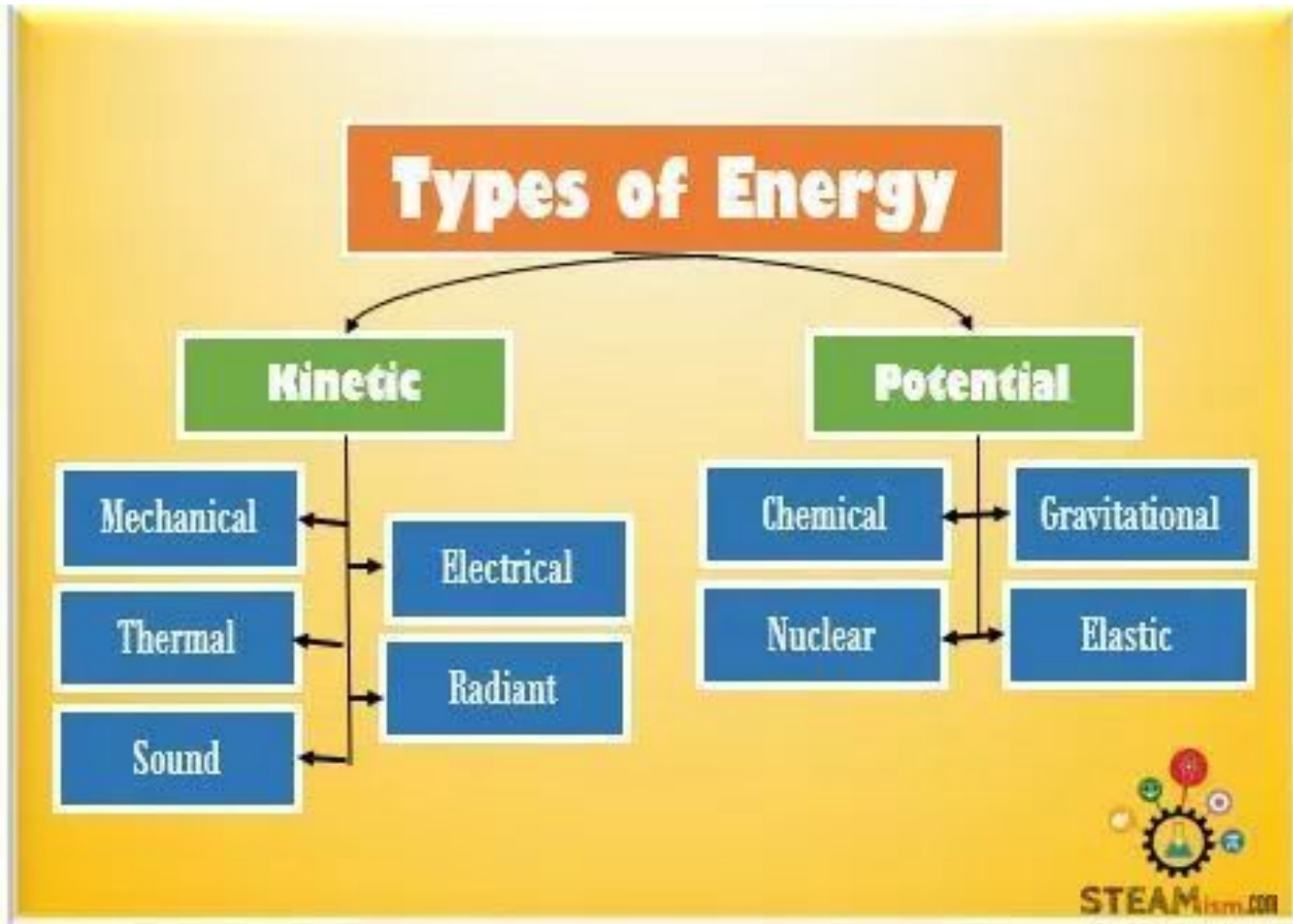


Types of Energy

- Now that we know how energy can transfer, we can understand the types of energy
 - Energy falls into two main categories:
 - **Kinetic Energy** - energy of motion (moving)
 - **Potential Energy** - energy of position (stored energy)



Categories of Energy



Forms of Energy

Energy can change from one form to another.

- Nuclear
 - Chemical
 - Thermal
 - Radiant/Light
 - Mechanical
 - Electrical
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