

# GENERAL CHEMISTRY

## STANDARD 2.4

**2.4: Differentiate among the different types of energy**

# WHAT IS ENERGY

- **Energy** is defined as the ability to do work
- **Work** is defined as a force applied over a distance
- **SI Unit for Energy/Work: Joule (J) =  $\frac{1 \text{ kg} \times \text{m}^2}{\text{s}^2}$**

# SIX TYPES OF ENERGY

- Heat
- Sound
- Light
- Chemical
- Electrical
- Mechanical (kinetic and potential)

# BRANCHES OF SCIENCE

- **Heat** - Thermodynamics
- **Sound** - Acoustics
- **Light** - Optics
- **Chemical** - Chemistry
- **Electrical** – Electromagnetic/Electromagnetism
- **Mechanical (kinetic and potential)**