

- Work = Force x Displacement in the direction of force

- $W = Fd = \Delta E$

- Gravitational Potential Energy = Mass x Gravity x Height

- $E_p = mgh$

- $\Delta E_p = mg\Delta h$

- Kinetic Energy

- $E_k = \frac{1}{2}mv^2$

- Efficiency

- $(\%) \text{ efficiency} = \frac{\text{useful energy output}}{\text{total energy input}} \times 100\%$

- $(\%) \text{ efficiency} = \frac{\text{useful power output}}{\text{total power input}} \times 100\%$

- Power = Work Done / Time Taken

- $P = \frac{W}{t} = \frac{\Delta E}{t}$

- Specific heat capacity

- $c = \frac{\Delta E}{m\Delta\theta}$