

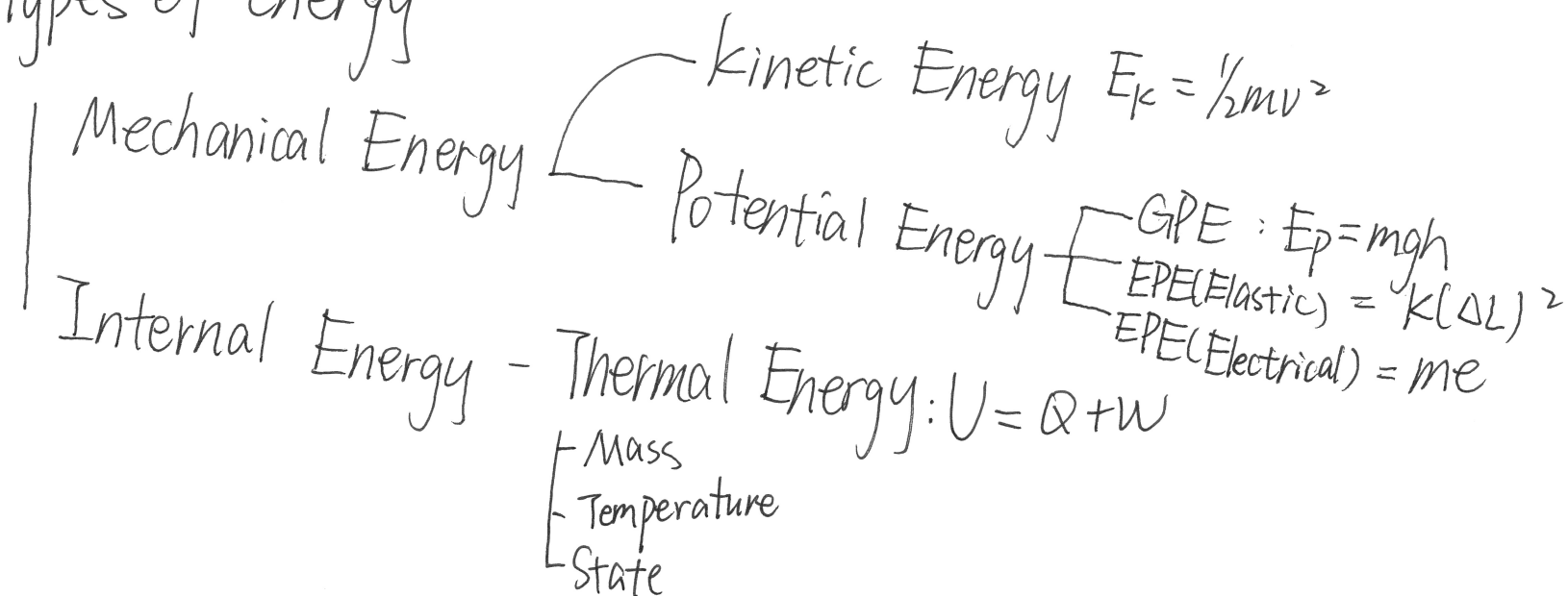
Energy

Definition: The ability to do work.

Work: Process quantity
Energy: State quantity

Unit: Joule(J)

Two types of energy



Power

Definition: The rate of work done

$$P = \frac{W}{t} \quad P = Fv$$

Work unit: Joule

Force
Distance

$$W = Fd$$

(Efficiency)

$$= \frac{\overset{\text{Useful}}{\text{Output power}}}{\underset{\text{Total}}{\text{Input power}}} \times 100\%$$

Resources

- Renewable
- Non-renewable