

ENERGY

- Law of Conservation- Energy cannot be destroyed or created, just transferred.
- Gravity- dependant on mass & reference point.
 -9.8 m/s^2

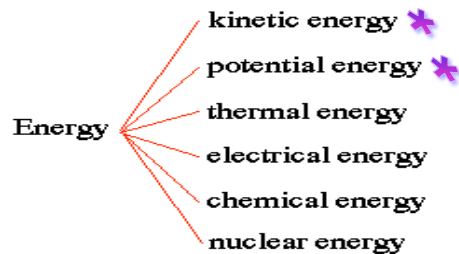


ENERGY

- The ability to create work or cause change.
- Many different types of energy.
 –Potential, Kinetic, Thermal, Chemical



TYPES OF ENERGY:



Types of Energy

KINETIC

- The energy an object has due to movement.
- Amount of energy varies due to mass & speed.
 higher M or S = higher KE

$$- KE = \frac{1}{2} \times M \times S^2$$



Types of Energy

POTENTIAL

Stored energy for later movement.

Amount of energy varies due to position or shape.

Higher position or more mass = higher PE

$$GPE = W \times H$$



NEW FORMULA'S

- ENERGY measured in Joules
- $GPE = W \times H$
–Gravity = $9.8m/s^2$
- $KE = 1/2 \times \text{Mass} \times \text{Speed}^2$

Potential & Kinetic ENERGY



	Potential	Kinetic
Wind turning a windmill's blade	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A lake backed up behind a dam	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A seam of coal deep in the earth	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A boy standing on top of a slide	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A girl zipping down a slide	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sun shining on a line of laundry	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Broccoli waiting on your dinner plate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A rollercoaster ride	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

