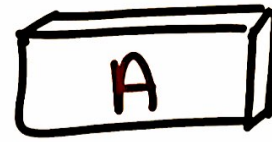


Energy

A physical property of matter that determines how much impact/change one object has on another.

Energy is transferred from one object to another.

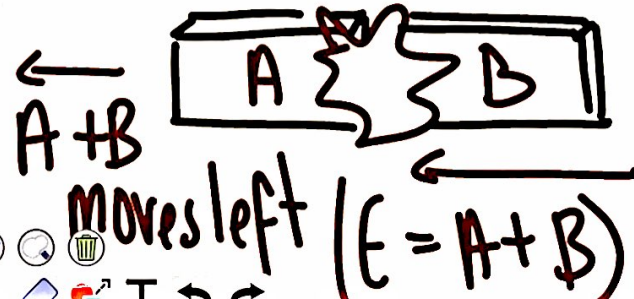


low E , not moving



← 10 m/s
speed

high E , moving at ↗



B transfers energy to A

Kinetic Energy (KE)

Energy of Motion of object



Speed mass 10kg

10 m/s

Box B has kinetic energy based on mass and speed

Energy Transfer

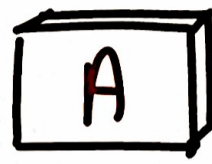
$$KE = \frac{1}{2} m \cdot v^2$$

$$PE = mgh$$

$$KE = -PE$$

Potential Energy (PE)

Stored Energy of object



mass (20kg)

Box A has potential energy based on mass and the effects of gravity and height above ground.