

Work - when force is applied to an object and it moves (in direction of force)

Work = force \times distance measured in N·m

$$W = F \times d \quad F = \frac{W}{d} \quad d = \frac{W}{F}$$

or
Joules (J)

No movement = No work!

Power - the rate of doing work

Power = $\frac{\text{Work}}{\text{time}}$ measured in J/s or Watts (W)

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

Momentum - products of an objects mass and velocity

Objects with a lot of momentum are hard to stop

Momentum = Mass \times Velocity measured in kg·m/s

$$\text{Mom.} = m \cdot v \quad m = \text{mom.} / v \quad v = \frac{\text{mom.}}{m}$$