

# Main Ideas

- Rotating objects have kinetic energy
  - $KE = \frac{1}{2} I \omega^2$
- Moment of Inertia  $I = \Sigma mr^2$ 
  - Depends on Mass
  - Depends on axis of rotation
- Energy is conserved but need to include rotational energy too:  $K_{rot} = \frac{1}{2} I \omega^2$