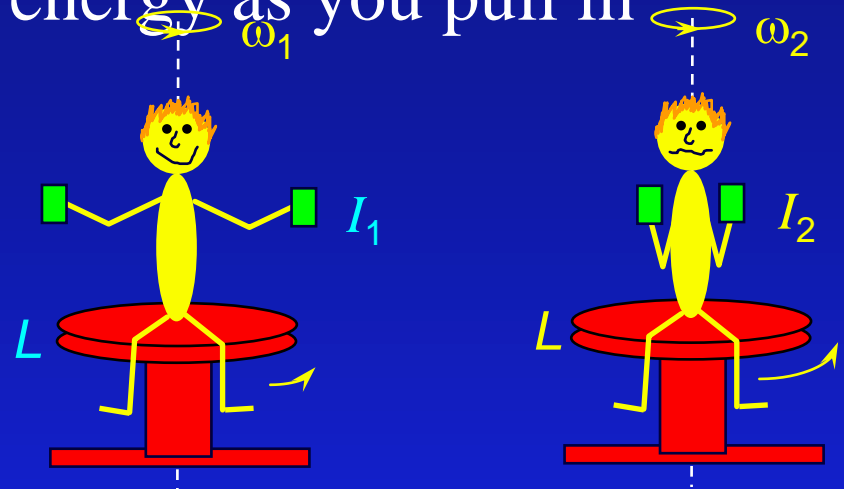


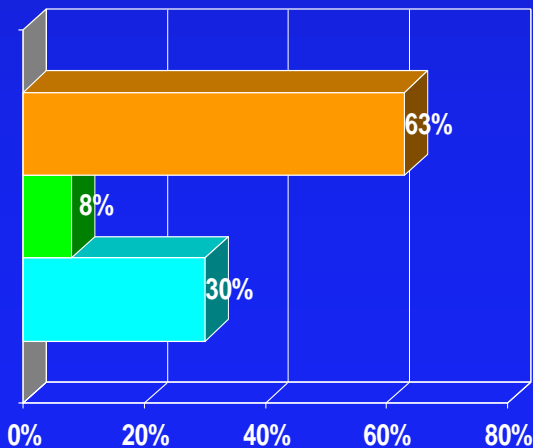
# Lecture 16, Preflight 3

What happens to your kinetic energy as you pull in your arms?

1. it increases ← CORRECT
2. it decreases
3. it stays the same



$$K = \frac{1}{2} I \omega^2 = \frac{1}{2I} I^2 \omega^2 = \frac{1}{2I} L^2 \quad (\text{using } L = I\omega)$$



"KE is inversely related to inertia, therefore, increases."