**Rotational Inetia**

**Inertia: is an object’s resistance to any change in motion.**

**Rotational Inertia: is an object’s resistance to any change in it’s rotation.**

**Rotational Inertia depends on how far the center of gravity is away from the plane of rotation.**

**As the distance between the center of gravity and the plane of rotation increase the more rotational inertia.**

**Example: a figure skater that is spinning and slows down when she spreads her arms.**

**\*\*When the skater extends her arms her arms she moves her center of gravity from further from the plane of rotation and slows down.**