

PHYSICS 151 READING  
ASSIGNMENT FOR NOVEMBER 7  
SECTION 7.4

**7.4 - Rotational Dynamics and Moment of Inertia**

- Newton's Second Law for rotation starts with the fact that torques cause angular acceleration.
- Moment of Inertia,  $I$  - The rotational counterpart to mass. It tells us how "hard" it is to rotate something.
- $\tau_{net} = I\alpha \Rightarrow$  the bigger the moment of inertia the more torque needed to rotate an object.
- For common shapes, use the table on page 216 to determine the moment of inertia.