Welcome to How Things Work II

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• Course website:
  - Go to the COD and click on the little icon below Physics 106.
  - Go to www.phys.virginia.edu (the physics web page), click on classes under academics, and click on the class web page for Physics 106.
  - Go to http://people.virginia.edu/~gdc4k/phys106/spring07
Question:

A rotary lawn mower spins its sharp blades over the lawn and cuts off the tops of the blades of grass. Would the lawn mower blades still cut the grass if the blades of grass weren’t attached to the ground?
General topic: Skating
Observations about skating

• At rest on a level surface:
  – If you just wait, you remain stationary.
  – If you are pushed, you start moving in that direction.

• Moving on a level surface:
  – If you just wait, you coast steadily in a straight line.
  – If you are pushed, you change direction or speed.
Physics concept:

- Inertia:
Physics concept:

- **Inertia:**
  - A body at rest tends to remain at rest.
Physics concept:

• **Inertia:**
  - A body at rest tends to remain at rest.
  - A body in motion tends to remain in motion.
Newton's first law, First version

An object that is free of external influences moves in a straight line and covers equal distances in equal times.
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