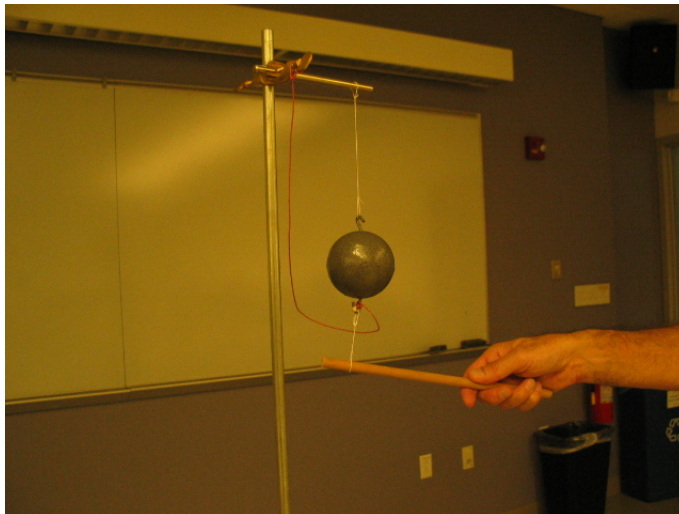


Inertia Ball



Purpose: To demonstrate that a steel ball resists rapid acceleration more strongly than slow acceleration (and therefore requires a greater force to produce a greater acceleration).

Location: room 136, shelf M2

Clamp the long rod vertically to a desk edge with a small horizontal rod clamped to the top. Suspend the heavy steel ball from the horizontal rod using light string and a hook on the ball. Attach another short string to the bottom hook on the ball and to the wooden dowel, which serves as a handle for you to pull downward. Pull downward quickly and the bottom string breaks. Pull downward slowly and the top string breaks. The difference: Inertia of the ball!