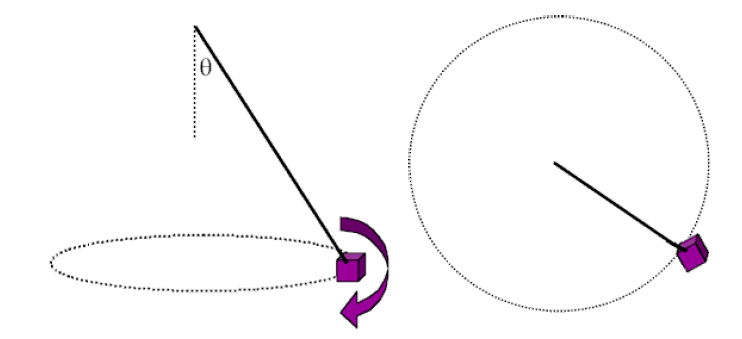
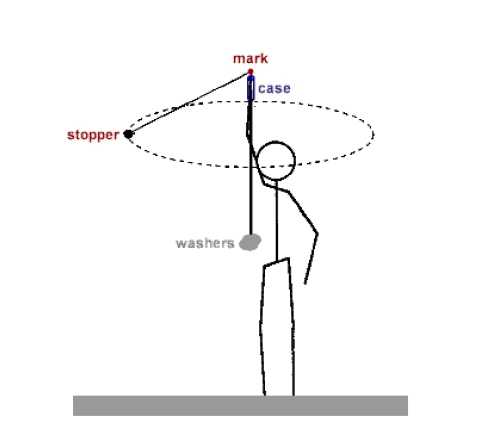
Conical Pendulum Lab

Objective: Explore the effects changing variables have on a conical pendulum.

A **conical pendulum** is a mass suspended from a string attached to a central point whose path is circular. The path of the string encloses a cone (hence, *conical* pendulum) 

The string makes some angle Ө with the vertical axis, while the circular path of the mass is entirely within the horizontal plane. The string itself can be threaded through a plastic case (like a pen casing) and attached to another mass (like washers)

Your tasks:

1. Create a free body diagram for both masses
2. Determine under what conditions the washers will be in static equilibrium.
3. What variables can be changed to cause the washers to move *upwards*?
4. What variables can be changed to cause the washers to move *downwards?*
5. How can you calculate the angle Ө between the string and the swinging stopper?