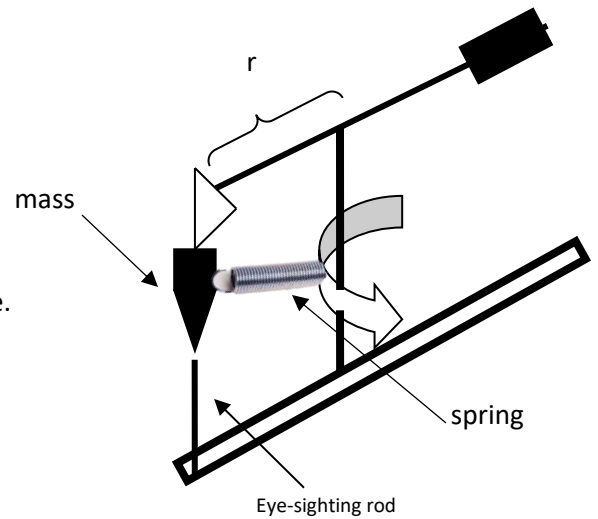


Circular Motion Lab:

1. Tighten screws on counterbalance and horizontal shaft.
2. Measure radius from strings to screw on horizontal shaft.
3. Undo spring and let the mass hang down and then slide the sight rod so it is directly under the mass. Remove the mass and find its mass with a pan balance.
4. Reattach the mass to the string and the spring to the mass. Use a spring scale (use paperclip from mass to spring scale) to pull out the mass so it is over the sight rod and record the **actual** centripetal force.
5. Spin the shaft so that the mass lines up with the sight rod and find the time for 10 rev. The period will be 1/10 that value.
6. Calculate the frequency, velocity, acceleration, and centripetal force (**experimental**).



Show work or each :

Radius Period frequency velocity accel. actual F_c experimental F_c