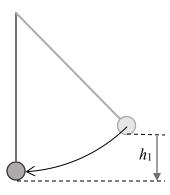
PENDULUM CHALLENGE PRE-LAB

1. A mass m on a cable starts from rest displaced from its vertical position. It swings down to the bottom of its arc, decreasing its height by a distance h_1 . What is its change in gravitational potential energy?



2. A body of mass m has a kinetic energy K_1 . What is its speed?

3. A metal ball of mass m is traveling in the horizontal direction with speed v when it is a height h_2 above the ground. It then free-falls to the ground without significant air resistance. How far does it travel horizontally before landing?

