In teams of 2 or 3, measure your pace and ocular height using the available tapes and meter sticks in the lab.

## I. Pace Measurement

Lay out a 50-meter tape in the hallway. Using your normal, relaxed stride, count the number of steps that it takes you to walk a distance of 50 meters. Record your data below. Keep this for a reference, you will be able to use this for field measurements later on. Repeat 3 times and take the average of the readings.

| Total Distance $=$ No. of Steps = | m <br> steps |
| :---: | :---: |
| Total Dist $/$ Steps $=$ | steps/m |
| Total Distance $=$ No. of Steps = | m steps |
| Total Dist / Steps = | steps/m |
| Total Distance $=$ No. of Steps = | m <br> steps |
| Total Dist $/$ Steps $=$ | steps/m |

Question: If you wanted to pace off a distance of 157.8 meters in front of the, how many steps would you need to take to measure it out? Show all of your math work and unit algebra!

## II. Ocular Height

Your ocular height is the distance from the floor / ground (i.e. the soles of your feet). Using a friend, go to the chalk board and carefully mark off your eye height from the floor, and measure the distance in meters. Record your data below.

Ocular Height $=$ $\qquad$ meters.

Question: You are walking up a hill and want to find buried treasure that is located 125 m from base. How many of your "ocular heights", would it take to rise 125 meters in elevation, up the hill? Show all of your math work and unit algebra!

