

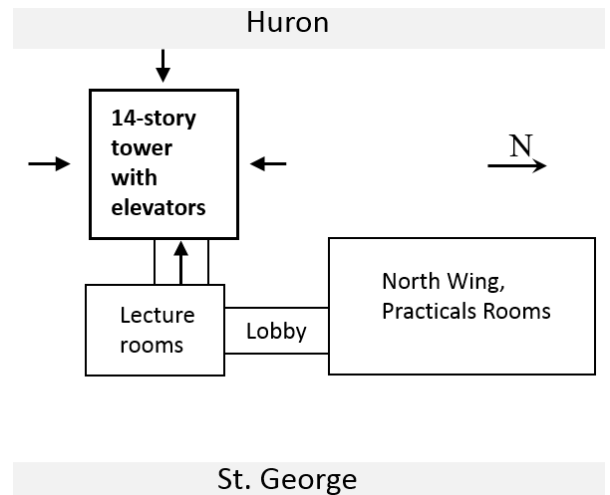
Mechanics Module 3 Preparation

Take a ride in one of the elevators in the tower of the Physics building, McLennan Labs. Observe the spring scale with a mass hanging from it as the elevator goes up and down the tower.

Jot down your observations on this page. Please bring the completed form to the Practical.

Date: _____.

Elevator number (1 through 4): _____.



1. Write down the reading of the scale when the elevator is *at rest*. [Note this is a 750 g mass.]
2. When the elevator goes **up**, what happens to the reading on the scale? Your answer should be both qualitative and quantitative. Include your starting and ending floors. You should refer to three stages to the motion: speeding up, coasting, and slowing down. To be extra-quantitative, you may want to use a stopwatch to actually measure the *duration* of each of these 3 stages.
3. When the elevator goes **down**, what happens to the reading on the scale? [Same suggestions as for problem 2.]

[Challenge Mechanics Problem (not for credit): From your observations in the elevator *alone*, can you deduce the distance between the basement and the 14th floor?]