



CLASS ACTIVITY

Measuring human power output

Break into teams of 4 to 5, get a mobility aid from 3-446, and go to tunnels in basement

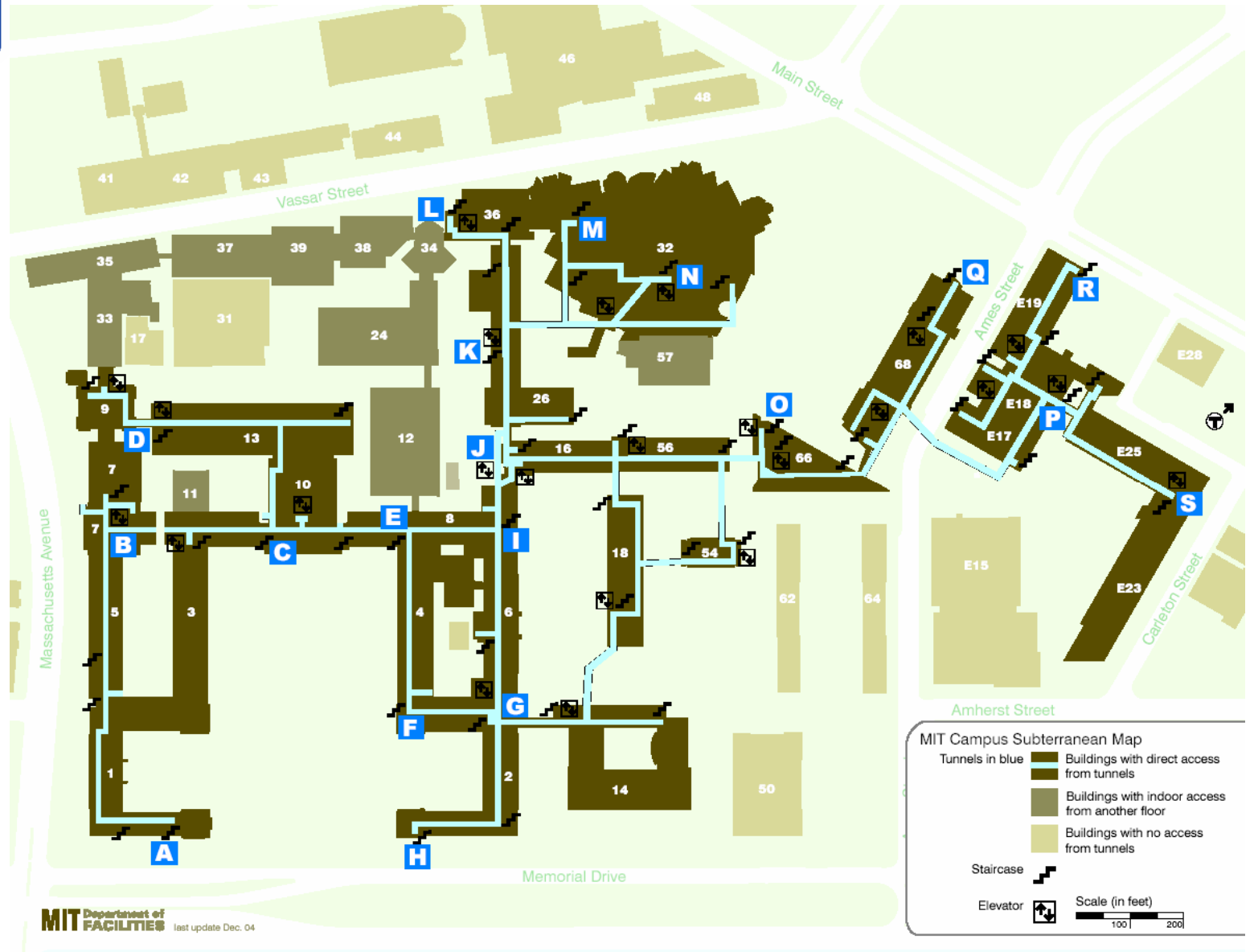
Tasks:

- **Measure the rolling resistance of your team's mobility aid and calculate the coefficient of rolling friction**
- **Measure your **MAX** mechanical power output on a flat surface for each person in the group (must travel at least 50 feet). Can use rolling start to negate transient effects.**
- **Estimate the angle of one of the tunnel ramps (you can do this mathematically and/or experimentally – don't just eyeball it)**
- **Measure each group member's mechanical power out while going up a ramp. (Note: one wheelchair team should go up backwards)**



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MIT tunnel map



February 23, 2007