Jump Up!

Role selection: Determine which member of your group is capable of jumping the highest. That member is the skeptic. Whoever jumps to the smallest height is the manager. The remaining member is the recorder.

Goal: The goal of this activity is to determine how many times the skeptic needs to jump to completely metabolize the bag of M&Ms that is presented at your table. Note that the human body converts food to mechanical work at a rate of approximately 25%. Is it possible to do enough jumps during a 10-minute jumping session? At the completion of this activity, there is a report to be submitted for your group. There is additionally a WebAssign to be done individually.

Report: There is a choice for the lab report. Your two options are:

1. A traditional lab report in the style of the first two we collected. A detailed rubric will be provided. Submit the report via WebAssign.
2. A presentation of this problem using the GOAL protocol in detailed protocol. Again, a detailed rubric will be provided.

In either case, handwritten calculations are permitted. (If you choose the GOAL option, you are permitted to entirely handwrite the submission, but it *must be neatly written*. Indicate on WebAssign that you will submit a handwritten GOAL solution at the start of class on the day it is due.)

Also, in either case, remember to do the report as a group! An example of good cooperation is as follows:

1. The entire group brainstorms and outlines the project
2. A group member writes a rough draft
3. *Every* member of the group reviews and modifies the draft
4. A different member than the writer of the rough draft creates a final draft

DO NOT split the project into pieces and copy and past them into a document together. It reads like a shoddy quilt, and it usually receives a poor grade.