Rubric: 100 points total TITLE (4 pts): Author list complete, with roles and group number included. Describes lab concisely, adequately, appropriately

ABSTRACT (6 pts): Summarizes the gist of each part in proper order Conveys a sense of the full report (including conclusion) concisely and effectively

INTRODUCTION (9 pts):

Effectively presents the goals of the report (answers the question "why am I doing this?") Successfully establishes the learning context, including relevant physics background Clearly explains any physics concepts used

PROCEDURE - MATERIALS, METHODS, & MOTIVATIONS (15 pts): Justifies approach and method from learning or prior knowledge (how did you know what to do?) Identifies all key materials/equipment used Presents clearly labeled figures of setup (drawings or photos) Clearly and concisely describes what was done in the lab Gives enough details to allow for replication

DATA & CALCULATIONS (15 pts):

Provides a free body diagram and labels quantities that were measured Sufficient, accurate data is collected by the group and presented Data and calculations are thoughtfully organized and easy to read Data have three significant figures (where possible) and units Sample calculations are presented, completed correctly, and explained clearly

RESULTS & CONCLUSION (21 pts):

Overall findings are stated clearly (big point is clearly emphasized) Results are physically plausible Conclusions (and physical arguments) are correct Questions from Charge on a Tape lab are sufficiently addressed (counts double!) Qualitative error analysis is provided (error sources, improvements, etc.) Major objectives from class/relevant chapters are explicitly addressed

PRESENTATION (12 pts):

No spelling errors (that's what spell-check is for!) English is concise and grammatically correct Lab report is written in past tense, consistent third **or** first person The report is organized, cleanly laid-out, and double-spaced

EFFECTIVE GROUP WORK (9 pts) The group made good use of allotted time The group performed functionally The report is cohesive (i.e., not simply "split up" among group members like a patchwork quilt)

GROUP EVALUATION (SEPARATELY GRADED, 9 points) total: 100