

**Physics: Forces (Chapter 4) Portfolio B1 (5%)****Name:**

Please include the following items in the order specified. Use this sheet as a cover for your package. (1 point will be deducted for each missing/incorrect question to the maximum value of each item.)

**Forces***Introduction to Forces and Newton's Laws*

- \_\_\_\_\_ (8) Any two (2) questions from *each* of the following (8 in total):
- Exercise B1 (Types of Forces)
  - Ch 4: #63, 64, 67, 72 (Mass vs. Weight)
  - Exercise B4 (Action-Reaction)
  - Ch 4: #75, 77, 79, 80 (Normal forces)
- \_\_\_\_\_ (4) Any four (4) questions targeting Newton's 2nd Law from Ch 4: #59 – 62, 68, 70.

*Force Analysis and Changes in Motion*

- \_\_\_\_\_ (8) Any four (4) questions from Ch 4: #73, 81, 86, 87 and/or Exercise B2 (#5 – 8)
- \_\_\_\_\_ (4) Any two (2) of the questions from Exercise B3 (#1 – 5)
- \_\_\_\_\_ (4) Any two (2) questions from Ch 4: # 69, 88 and/or Exercise B3 (#6, 7)

*Going for the A*

- \_\_\_\_\_ (2) Ch 4: #89
- \_\_\_\_\_ (3) Ch 4: #100

*Problem of the Week Buckle Up*

- \_\_\_\_\_ (5)

\_\_\_\_\_ (10) *Effort*

Section Review, Mastering Concepts, Applying Concepts, and Practice Problems are designed to practice skills, reinforce concepts and make connections between science and society. An effort grade will be assigned based on the number of these questions successfully completed.

**\*Questions used from the sections above may not be used for this category. Correct answers may be necessary to receive full marks.**

Number of Questions Completed	Score	Number of Questions Completed	Score
≥25	10	10 – 14	4
20 - 24	8	5 – 9	2
15 – 19	6	Less than 5	0

\_\_\_\_\_ (6) *Organization and Appearance*

Description	Score
Portfolio is handed in on time; communication is neat and shows complete reasoning and full process (including formulas, units, and rounded final answers)	6
Portfolio is handed in on time; communication shows incomplete reasoning and process is weak in one key area (neatness, units, rounded answers, formula/set-up, etc.)	4
Portfolio is handed in on time; communication shows incomplete reasoning and process is weak in two key areas (neatness, units, rounded answers, formula/set-up, etc.)	2
Portfolio is late OR Communication shows incomplete reasoning and process is weak in all key areas (neatness, units, rounded answers, formula/set-up, etc.)	0

- \_\_\_\_\_ (54) Total