

Chapter 4 Study Guide

Prior to lecture:

1. Read Ch. 4 in the textbook
2. Define the following terms:
 - a. System
 - b. Force
 - c. Friction
 - d. Inertia
 - e. Inertial frame of reference
 - f. Dynamics
 - g. Normal Force
 - h. Weight
 - i. Tension
3. On a sheet of paper, complete the “Take-Home Experiments: Mass and Weight” on page 133. Answer all questions.
4. On a sheet of paper, summarize the “Common Misconceptions” on pages 133 and 139
5. Write Newton’s three laws of motion as defined in the textbook. Rewrite them in your own words.
6. Answer conceptual questions 2, 4, 5, and 9 on page 159 of the text.

After lecture:

1. Review notes from lecture
2. Redo all example problems from lecture
3. Reread text
4. Answer conceptual questions 3, 6, 12, 13, and 14 on pages 159-160 of the text.
5. Work through example problem 4.3, 4.5, 4.6, 4.7, and 4.9 in the text.
6. Answer conceptual questions 18, 21, 22, and 25 on page 160 of the text.
7. Redo all recitation worksheet problems
8. Complete homework for chapter 4
9. For extra practice, try the following problems from chapter 4 of the textbook: 1, 6, 7, 11, 12, 16, 17, 22, 26, 29, 30, 33, 34, 41, 42, 46, 49, 52