

Chapter 14 Study Guide

Prior to lecture:

1. Read Ch. 14 in the textbook
2. On a sheet of paper, complete the “Check Your understanding” on pages 475, 480, 485, 486, 490, and 498
3. Work through example problem 14.1 in the text.
4. Read the “Problem-Solving Strategies for the Methods of Heat Transfer” on page 499. Rewrite the procedure in your own words.
5. Answer conceptual questions 1, 4, 7, 9, 12, and 17 on pages 500-501 of the text.
6. Define the following terms:
 - a. Heat
 - b. Convection
 - c. Conduction
 - d. Radiation
 - e. Emissivity
 - f. Stefan-Boltzmann Law of radiation
 - g. Specific heat
 - h. Thermal Conductivity

After lecture:

1. Review notes from lecture
2. Redo all example problems from lecture
3. Reread text
4. Work through examples 14.2, 14.4, 14.5, 14.7, and 14.9 in the text.
5. Redo all recitation worksheet problems
6. Answer conceptual questions 3, 5, 10, 11, 14, 16, 18, 19, 21 and 23 on pages 500-502 of the text.
7. Complete homework for chapter 14
8. For extra practice, try the following problems from chapter 14 of the textbook: 2, 4, 10, 12, 15, 18, 19, 22, 30, 32, 35, 40, 46, 50, 56, 60, 65