

Chapter 21 Study Guide

Prior to lecture:

1. Read Ch. 21 in textbook
2. Work through example problem 21.1 and 21.3.
3. Read the “Problem-Solving Strategies for Series and Parallel Resistors” on pages 747. Rewrite the procedure in your own words.
4. Complete the “Check your Understanding” problems on pages 747 and 758.
5. Answer conceptual questions 1, 3, 13, and 28 on page 770 of the text.
6. Define the following terms:
 - a. Series resistance sum rule
 - b. Parallel resistance sum rule
 - c. Electromotive force (emf)
 - d. Terminal voltage
 - e. Internal resistance
 - f. Kirchhoff’s junction rule
 - g. Kirchhoff’s loop rule
 - h. Galvanometer
 - i. Voltmeter
 - j. Ammeter
 - k. Potentiometer
 - l. RC circuit
 - m. RC time constant
 - n. Joule heating

After the lecture

1. Review notes from lecture.
2. Redo all example problems from lecture.
3. Reread text
4. Work through example problem 21.4, 21.5, 21.6 and 21.7.
5. Redo all recitation worksheet problems
6. Answer conceptual questions 8, 20, 21, 25, 26, 34 and 36 of the text.
7. Complete homework for chapter 21
8. For extra practice, try the following problems from chapter 21 of the textbook: 4, 6, 10, 17, 20, 23, 35, 38, 40, 42, 44, 47, 50, 62, 63, 65, and 70.