Chapter 16 Study Guide

Prior to lecture:

1. Read Ch. 16 in the textbook
2. On a sheet of paper, write down the definition for longitudinal and transverse waves. Rewrite each definition in your own words and give an example of each type of wave.
3. Work through example problem 16.1 and 16.3 in the text.
4. Complete the "Check your understanding" on pages 559, 561, 564, 569, 576, and 583.
5. On a sheet of paper, complete the "Take-Home Experiments" on pages 562 and 578. Answer all questions.
6. Answer conceptual questions 1, 2, 7, 9, 10, 13 and 17 on pages 588 and 589 of the text.
7. Define the following terms:
    a. Period
    b. Frequency
    c. Wave velocity
    d. Resonance
    e. Simple Harmonic Motion
    f. Amplitude
    g. Node
    h. Antinode
    i. Wavelength
    j. Superposition
    k. Periodic motion
    l. Intensity
    m. Natural frequency
    n. Beat frequency

After lecture:

1. Review notes from lecture
2. Redo all example problems from lecture
3. Reread text
4. Work through examples 16.2, 16.5, 16.6, 16.7, 16.8, and 16.10 in the text.
5. Redo all recitation worksheet problems
6. Answer conceptual questions 3, 4, 8, 11, 14, 15, 16, and 18 on pages 588-589 of the text.
7. Complete homework for chapter 16
8. For extra practice, try the following problems from chapter 16 of the textbook: 1, 4, 8, 11, 18, 23, 28, 33, 34, 39, 40, 41, 43, 45, 47, 49, 54, 58, 59, 63, 64, 71