

Preview Sheet for Test 4
Chemical Equilibrium and Acid-Base Chemistry
Chapters 9 and 10; Lectures from 11/17 through 12/6; Problem Sets 9 and 10

The test will be on Thursday, November 18, in our normal classroom (Olin-Rice 370.) It will start at 9:00 a.m. and end at 11:00 a.m.

Studying strategies:

- Do extra problems at the ends of the chapters. If you do not have access to the solution for a given problem, please come talk with me to check your work.
- Focus on your lecture notes and homework.
- As you study for the test, prepare a cheat sheet of what you deem to be key facts, definitions, equations, and other useful information. You may fill up to one side of a normal piece of paper with notes. You may use this sheet during the exam. Note that I will provide only a periodic table and physical constants on the last page of the test.
- The format will be like Test 3, with a mixture of calculations and (mandatory) short essay questions.
- If a topic was not covered in homework or in lecture, you are not responsible for it!
- Please remember to bring a calculator to the exam!

Instructions before starting the test:

1. Your exam booklet should have **six** pages total, with questions on pages 2-5, and a periodic table and constants on page 6. Check to see you have six pages now. If you do not, ask for another copy of the exam.
2. Write your name in the space above and on the backs of pages 2-5.
3. You are allowed to use as a reference one side of one 8.5" by 11" piece of paper filled with whatever information you choose to write (or type).
4. For numerical problems, please present your method of calculation clearly. Be sure to include units and the correct number of significant figures.
5. You have **120 minutes** to work on this exam.