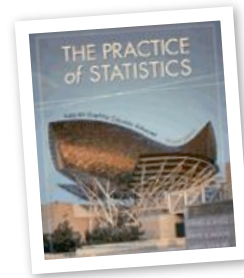# AP Statistics Chapter 11: Inference for Means

"A statistical analysis, properly conducted, is a delicate dissection of uncertainties, a surgery of suppositions."

~M.J. Moroney

Date		Stats	Lesson	Assignment	Done
Tentative Lesson Guide					
Wed	2/14	11.1	t Distributions	Rd 616-619 Do 1-5	
Thu	2/15	11.1	t intervals and tests	Rd 621-628 Do 7-11	
Fri	2/16	11.1	Practice	Practice Problems	
Mon	2/19		*No School*		
Tues	2/20	**Qz**	**Quiz 11.1**	Rd 648-656 Do 37-38	
Wed	2/21	11.1	Matched Pairs t test	Rd 628-640 Do 12-17	
Thu	2/22	11.2	Comparing Two Means	Rd 658-667 Do 39-43, 47, 49	
Fri	2/23	**Qz**	**Quiz 11.2**	Rd 667-668 Do 50, 53, 55	
Mon	2/26	Rev	Review Ch 11	Rd 673-674 Do 62-65, 72	
Tues	2/27	**Ex**	**Exam Chapter 11**	Online Quiz Due	

Note:

The purpose of this guide is to help you organize your studies for this chapter. The schedule and assignments may change slightly.

Keep your homework organized and refer to this when you turn in your assignments at the end of the chapter.

Class Website:

Be sure to log on to the class website for notes, worksheets, links to our text companion site, etc.

http://web.mac.com/statsmonkey

Don't forget to take your online quiz! Be sure to enter my email address correctly!
http://bcs.whfreeman.com/yates2e

My email address is:

jmmolesky@isd194.k12.mn.us

Chapter 11 Objectives and Skills:

These are the expectations for this chapter. You should be able to answer these questions and perform these tasks accurately and thoroughly. Although this is not an exhaustive review sheet, it gives a good idea of the "big picture" skills that you should have after completing this chapter. The more thoroughly and accurately you can complete these tasks, the better your preparation.

t-Distributions

☐ Describe the sampling distribution of x-bar when the population standard deviation is unknown.

☐ Describe t-distributions for different degrees of freedom. Note that the t-distribution becomes approximately normal as n approaches infinity.

☐ Find t-statistics and p-values for sample means.

Inference for a Single Mean

☐ Construct and interpret a level C confidence interval for a single mean when the population standard deviation is not known.

☐ Conduct a significance test for a claim about a single mean.

☐ Conduct a matched pairs t-test for the mean difference in a matched pairs setting.

Inference for Two Means

☐ Describe the sampling distribution for the difference between sample means from two independent populations.

☐ Calculate and interpret a Level C confidence interval for the difference between two means.

☐ Conduct a two-sample t-test for the difference between two means.

☐

Calculator Procedures

☐ Be able to calculate and interpret Confidence Intervals for means using your graphing calculator.

☐ Be able to perform a one- or two-sample t-test using your graphing calculator.

☐ Recognize that the graphing calculator is only a tool to provide you with the test statistic and p-value...it is up to YOU to interpret the results!