

## 2023-2024 AP Statistics Assignments

(see web site for reading guides, glossaries of important terms, notes, HW answers, and other goodies)

**This Chapter is vocabulary intensive !!!!!!!!!!!!!**

- It is important you understand the vocabulary, take notes, and come to class prepared to ask & ANSWER questions.
- TIPS: Do Guided Notes while reading. Print and read Glossary of important terms. Make flashcards.

**Graded NOTES (4x)- See Google Classroom for the template 'Analyzing Experiments Study Guide.' MUST TYPED. NO PLAGIRISM! Due day of test.**

Chapter	Day	Topics	Objectives: Students will be able to...	Homework	Reading	4B
4	0 (post test)	4.1 Introduction, Sampling and Surveys, How to Sample Badly, How to Sample Well: Random Samples	<ul style="list-style-type: none"> <li>• Identify the population and sample in a sample survey.</li> <li>• Identify voluntary response samples and convenience samples.</li> <li>• Explain how these bad sampling methods can lead to bias.</li> <li>• Describe how to use Table D to select a simple random sample (SRS).</li> </ul>	Table D in back of TPS4e 1, 3, 5, 7, 9, 11, <del>13</del>	Section 4.1	24-Oct
4	1	4.1 Other Sampling Methods; Inference for Sampling, Sample Surveys: What Can Go Wrong? <i>Activity 1: 4.1 Review Sampling Methods and Types of Bias</i> <i>Group Activity 1: Frappy's 2001q3, 2008q2</i>	<ul style="list-style-type: none"> <li>• Distinguish a simple random sample from a stratified random sample or cluster sample. Give advantages and disadvantages of each sampling method.</li> <li>• Explain how undercoverage, nonresponse, and question wording can lead to bias in a sample survey.</li> </ul>	13, 17, 21, 23, 27, 31, 33, 35, <b>Complete &amp; Grade</b> Frappy's started in class	Section 4.2 pgs. 231-236	26-Oct
<b>Quarter 1 ends October 27th</b>						
4	2	4.2 Observational Studies vs. Experiments, The Language of Experiments, How to Experiment Badly <i>Activity 1: 4.2a Introduction to Experiments (includes 1998q3)</i> <i>Activity 2: The Jelly Blubber Sampling Design Activity (absent students do desmos version)</i>	<ul style="list-style-type: none"> <li>• Distinguish between an observational study and an experiment.</li> <li>*Identify the experimental units or subjects, explanatory variables (factors), treatments, and response variables in an experiment.</li> </ul>	45, 47, 51, 53 <b>Complete &amp; Grade</b> Frappy's 2004Bq2 and 2010Bq2	Finish Section 4.2	30-Oct
4	3	4.2 Experiments: How to Experiment Well with the 3 Principles of Experimental Design <i>Activity 1 Frappy Discussion - 1998q3(w/4.2a), 1999q3(w/F's) 2000q5(w/F's)</i>	<ul style="list-style-type: none"> <li>• Describe a completely randomized design for an experiment.</li> <li>• Explain why random assignment is an important experimental design principle.</li> <li>• Explain how a lurking/extraneous variable in an observational study can lead to confounding.</li> </ul>	57, 59, 61a, 62 (do NOT carry out RA), 63 <b>Complete &amp; Grade</b> Frappy's 1998q3, 1999q3, 2000q5		nov1 (ER)
4	4	4.2 Key Principals for Experiments plus Blocking, Blinding <i>Activity 1: 4.2b Designing Studies</i>	<ul style="list-style-type: none"> <li>• Distinguish between a completely randomized design and a randomized block design.</li> <li>• Explain the meaning and the purpose of blinding in an experiment.</li> </ul>	65, 67, 78, 79ab	Read Section 4.3	3-Nov
4	5	4.2 Matched Pairs Design <i>Activity 1: Match Pairs - TPS4e #'s 84&amp;85 5, PLUS T4.14</i>	<ul style="list-style-type: none"> <li>• Know when a matched pairs experimental design is appropriate and how to implement such a design.</li> </ul>	<b>Finish 84, 85, T4.14</b> <b>Complete &amp; Grade:</b> Frappy's 2002q2, 2004q2 (match pairs)		7-Nov
<b>Nov8(1/2 day) - Nov9(1/2 day) - Veteran's Day(Nov10 no school)</b>						
4	6	<i>Activity 1: Scope of Inference (discussion and Desmos)</i>	<ul style="list-style-type: none"> <li>• Explain in context what "statistically significant" means.</li> <li>• Determine the scope of inference for a statistical study.</li> <li>• Evaluate whether a statistical study has been carried out in an ethical manner.</li> </ul>	103, 105, 106 <b>Complete and Grade:</b> Frappy's 2003q4, 2006q5, 2007q2, 2006Bq5		nov9 (ER)
4	7	<b>Chapter Review:</b> <i>Activity: Practice Quiz</i>		Chapter 4 MC handou Ch4 TPS Practice Test Complete Guided Notes - post to GC Complete Frappy's		14-Nov
4	8	<b>Chapter 4 Test - Guided Notes(4x) and Frappy's(6x) due this class</b>		Read Section 5.1 and do #s 1, 3, 13, 17, 19		16-Nov
<b>THANKSGIVING- NOV22-26 (off)</b>						