2026 - 2027
AP STATISTICS SUMMER ASSIGNMENT
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Introduction:
Welcome to AP Statistics!

Included in this packet, you will find important information about resources/supplies, what you can expect from the course**,** grading policies, how you can succeed in this course and the summer assignment.

The purpose of the summer assignment is to help us to begin with a strong start in the fall and to also ensure that we have sufficient time to cover all of the required course material AND have time to review prior to the AP Statistics Exam in May 2027. The summer assignment covers the first chapter of the AP Statistics Textbook, a review of essential Algebra I and Algebra II concepts necessary for the course and vocabulary you will need to know prior to the course.

Please read the directions carefully. Please feel free to email me (salvatorem@gilbertschool.org) if you have any questions or need clarification on any expectations; I will be checking my email periodically over the summer.

In this class, you will learn to describe and analyze data. This course is not like any other math course that you have taken in that it is a combination of Math and English; reading, writing and analysis skills are just as important in this class as math skills. Statistics is very important to many different career fields beyond those typically related to math. It can be a very challenging class at times and communication and self-advocacy skills are very important. Since it is an AP course, it is considered to be college-level and will move at a college-level pace; there is a great deal of material that is required to be covered by approximately April vacation.

Resources/Supplies:

- ☐ **Google Classroom**: class code: **5i3o2dxe**
- ☐ **Khan Academy Classroom:** class code: **BVXV5N4S**
- ☐ **College Board AP Classroom:** Class code will be given within the first week of class.
- ☐ **Textbook: The Practice of Statistics 5th Edition**
- ☐ **Textbook: MathMedic**
- ☐ **Graphing Calculator (REQUIRED for each class period):** minimum of a TI-84. You will need this for homework assignments and the AP Statistics exam. I do have a class set of TI-84 Plus CE but you will not be able to take these home.

  NOTE: Shop around for "Back to School" Sales
- ☐ **Large Binder** with loose leaf paper (this usually works best for notes, homework, handouts)
- ☐ **Pencils, pens and erasers**

What you can expect from the course…….

- ☐ **Summer Assignment AND Vocabulary Assessment during first week of school**
- ☐ Direct instruction, activities, flipped classroom (notes at home, activities in class), partner activities, projects
- ☐ **HOMEWORK IS ASSIGNED EACH CLASS PERIOD DUE NEXT CLASS**
- ☐ Quizzes/Tests/Projects/Investigative Tasks
- ☐ Tests which will include all of the material on the current and prior units
- ☐ You will not receive a review sheet for assessments; it will be your responsibility to review the material.
- ☐ **READ** the text prior to instruction
- ☐ Show all necessary work for full credit on homework, unless I state otherwise.
- ☐ Explaining in words how your results relate to the given problem.
- ☐ AP Statistics Exam (expect 3 hours): Within the first two weeks of May.
  The AP Statistics Exam consists of the following:
  - ☐ **42 MCQ**
  - ☐ **4 FRQ**
  - ☐ **This exam is DIGITAL for 2027- You will complete the entire exam in Bluebook**

Grading Policy:

- ☐ Formal Grading policy will be discussed during the first class meeting. Your quarter grade will include: Homework/Classwork, Quizzes/Smaller Projects/Investigative Tasks, Unit Tests/Larger Projects
- ☐ There will be a Midterm Exam (January) and a Mock AP Statistics Exam (approximately first week in April) that are required for this course.
- ☐ There will be a Quarter 4 Project to be completed after the AP Statistics Exam in May.
- ☐ There is NO FINAL EXAM IN JUNE

How to Succeed in AP Statistics:

- ☐ Take notes in class and keep an organized binder (write the date, chapter, and topic on your notes, for example; divide your binder by unit) **There will be notebook checks as part of your quarter grade in this course**
- ☐ Complete each homework assignment and check your solutions
- ☐ Do not wait to ask for help; send an email and/or make an appointment with me early if you need help.
- ☐ Read your textbook
- ☐ Use online resources like Khan Academy, College Board, etc. for more information and practice problems

Academic Integrity:

It is expected that you do your own work on all assignments given and **NOT** copy the answers from another person or another source (internet, textbook, etc.). Zeros will be given for any instance of plagiarism, parents will be contacted and other appropriate consequences will be given (per TGS student handbook)

Group projects/activities will require equitable distribution of work.

Summer Assignment:

Part 1 (DUE BEFORE June 17 of THIS SCHOOL YEAR)!):

This is the easiest part of your summer assignment!!

- ☐ Join the AP Statistics Google Classroom: Class Code: **5i3o2dxe**
- ☐ Complete the AP Statistics Survey in Google Classroom (It is a Google Form under the "Classwork Tab" under the "Summer Assignment" Topic) to help me to know you more as a student (Some of the questions are mandatory, some are optional - you ***MUST*** answer the mandatory ones to be able to submit the form).
- ☐ Remember to fill out and turn in AP Agreement to Mrs. Steeves in Guidance by June 17
- ☐ Join Khan Academy Class: Class Code (in Google Classroom): **BVXV5N4S**

NOTE:
CHROMEBOOKS: You must meet with IT on your scheduled turn-in day, with your Chromebook and power cord. However, you will be able to sign out your Chromebook for the summer after you meet with them.

Part 2: Purchase the Following Supplies (See RESOURCES/SUPPLIES):

- ☐ Graphing Calculator
- ☐ Large Binder with paper, dividers, etc.
    - ☐ Label each section Unit 1 - 10

NOTE: Please reach out to me if you have any issues purchasing supplies.

Part 3: Summer Assignment DUE August 27, 2026

- ☐ **Khan Academy:** Complete the "Getting Ready for AP Statistics" Khan Academy - the assigned Quizzes and Unit Tests are ***mandatory***, the unassigned videos and problem sets are ***optional***

- ☐ **Assignment (From *The Practice of Statistics, 5th Edition online* textbook):**
    - ☐ **Read Chapter 1: Exploring Data AND** take notes; there will be a test on this chapter within the first week of school.

    - ☐ **Vocabulary (Quiz to be given during FIRST WEEK OF SCHOOL!):** Define the vocabulary words listed below. Provide an example of each, where appropriate. All words can be found in chapter 1.

    - ☐ Submit the vocabulary to Google Classroom on Google Docs (there will be an assignment labelled VOCAB - CHAPTER 1)
    - ☐ Print out the vocabulary terms and place them in your binder
    - ☐ You will be assessed on these vocabulary words during the first week of school.

1. Statistics
2. Individual
3. Variable
4. Categorical Variable
5. Quantitative Variable
6. Distribution
7. Frequency Table
8. Relative Frequency Table
9. Bar graph

10. Pie chart
11. Two-way Table
12. Marginal Distribution
13. Conditional Distribution
14. Side-by-side bar Graph
15. Segmented Bar Graph
16. Association
17. Causation
18. Dotplot
19. Symmetric
20. Skewed right
21. Skewed left
22. Outlier
23. Mode
24. Unimodal
25. Bimodal
26. Multimodal
27. Stemplot
28. Histogram
29. Mean
30. Resistant
31. Median
32. Range
33. Standard Deviation
34. Quartiles
35. First Quartile (Q1)
36. Third Quartile (Q3)
37. Interquartile Range (IQR)
38. 5-number summary
39. Boxplot
40. Percentile

☐ **Practice Problems (Due by first class)**

General Directions: Please either use a separate sheet of paper (attached to this packet when turned in) or a Google Doc, shared with me, to complete the following **TEXTBOOK** work.

- ☐ **Page 6 (1, 3, 5, 7)**
- ☐ **Page 20 (9, 14, 17, 23, 32)**
- ☐ **Page 41 (37, 39, 47, 51, 70)**
- ☐ **Page 69 (79, 81, 89)**

☐ **Categorical or Quantitative**. Determine if the variables listed below are quantitative or categorical (You can use the letters ***C*** or ***Q***)

1. Time it takes to get to school _____
2. Number of people under 18 living in a household _____
3. Hair color _____
4. Temperature if a cup of coffee _____
5. Teacher salaries _____
6. Gender _____
7. Smoking _____
8. Height _____
9. Amount of oil spilled _____
10. Age of Oscar winner _____
11. Make and model of car _____
12. Jelly Bean flavors _____

13. Country of origin _____

14. Type of meat sold at a supermarket _____

15. Number of shoes owned _____

☐ **Algebra Problems**:

The prerequisite for AP Statistics is Algebra II. Although there will not be much equation solving in this course, there will be some; a quick review of Algebra I and Algebra II content will be helpful.

A formula that is used often in AP Statistics in one used for a z-score:

$$z = \frac{x - \bar{x}}{s}$$

1. If z = 2.5, x = 102, and $\bar{x}$ = 100. What is the value of s? Show your work.

2. If z = -3.35, x = 60, and s = 4, what is the value of $\bar{x}$? Show your work.

3. Solve $0.05 = 1.96\sqrt{\frac{0.5^2}{n}}$ for n.

4. If $-1.64 = \frac{60 - \mu}{\sigma}$ and $1.96 = \frac{95 - \mu}{\sigma}$

5. Basic math concepts such as dividing fractions become necessary when calculating probabilities. Divide the two fractions below. Show all steps. Do **NOT** change the fractions to decimals.

$$\frac{\frac{2}{3}}{\frac{6}{14}}$$

6. Basic math concepts such as multiplication of fractions become necessary when calculating probabilities. Multiply the two fractions below. Show all steps. Do **NOT** change the fractions to decimals.

$$\frac{2}{5} \cdot \frac{5}{6}$$

7. Basic math concepts such as addition of fractions become necessary when calculating probabilities. Add the two fractions below. Show all steps. Do **NOT** change the fractions to decimals.

10

$$\frac{2}{5} + \frac{5}{6}$$