

AP STATISTICS

2017-2018

SUMMER ASSIGNMENT

You will turn in this assignment and
the textbook packet on the first day of class.

This is in part an assignment about
YOUR ABILITY TO FOLLOW INSTRUCTIONS!

NAME _____

Write **DATE** of completion for each item in the space provided.

_____ Read the *Introduction* paragraph with this packet.

_____ Read the introduction to your textbook in the copied packet –
pages xii-xx.

_____ Read the “Overview – What is Statistics?” in the copied packet –
pages xxi-xxiii. Answer the question and do the task in this
packet from that section.

_____ Follow the instructions in this packet for Section 4.1 of the
textbook.

_____ E-mail me at schauerj@wlwv.k12.or.us some time during the
summer about topics you might be interested in pursuing for
your ISEF research project. See Part III of this packet for
more details.

_____ Have a really fun and enjoyable summer ☺

GREETINGS

AP STATISTICS STUDENTS!!

Introduction: Because we lose nearly a month of the year due to the timing of AP testing, it is important that we start the year a little ahead. Therefore, there is a summer assignment associated with this class that each of you should complete well before the first day of school. The assignment is intended to introduce you to the nature of the class material you are about to experience, the textbook that will support you in learning Statistics and also get you thinking about a topic you would be passionate about doing a research project on that will apply what you are learning in class to a real-world situation.

I'm looking forward to getting to work with all of you next year.

Have a great summer, Mr. Schauer

E-mail contact: schauerj@wlwv.k12.or.us

PART I. Overview of Statistics (xx-xxiii).

1. How would you describe the trend for “Life Expectancy” relative to “Income per person in 2012” shown in the graph?
2. Rewrite the italicized sentences at the bottom of page xxiii. This is an EXTREMELY important concept!

PART II. Chapter : Designing Studies – Section 4.1: Sampling and Surveys.

This introduces you how to collect data for observational studies. We will expand on this topic and also learn how to properly collect data from experiments during our first unit. This should also help you think about how to properly collect data for your future research project.

1. Read this section and especially pay attention to key terms as they are presented.

2. Answer the questions for “Check Your Understanding” on page 213 on your own paper then check your answers with the key at the end of the copied packet.
3. Continue reading and answer “Check Your Understanding” on page 223 on your own paper then check your answers with the key at the end of the copied packet.
4. Finish reading and answer “Check Your Understanding” on page 228 on your own paper then check your answers with the key at the end of the copied packet.
5. Under Section 4.1 Exercises answer questions 1, 5, 9, 13, 21, 37, 39, and 41 on your own paper and then check the answers at the back of the packet.
6. Staple your checked work from parts 2-5 above to the back of this packet.

PART III. Research Project.

As part of AP Statistics you will conduct an in-depth research project involving either an observational study (acceptable) or an experiment (preferable) that applies what you are learning throughout the course to a topic that you are interested in either as a field of study, future career or some other area that piques your interest.

You will have supported class time to work on part of this project (previous members of the class would recommend you use this time better than most of them did). You may work with one partner (previous members of the class would tell you to choose your partner **VERY** carefully).

Your project will eventually be presented to professionals during the judging phase of our district wide Intel Science and Engineering Fair (aka ISEF). At that fair you may earn awards, cash, scholarships, selection to State-level competition, selection to International-level competition or simply an experience that cannot be re-created in the classroom.

At some point during the summer you need to contact me via email to share ideas, questions or areas of study you might be interested in pursuing. We will get really rolling on projects at the end of our first unit, but you can get a jump start on it during the summer if you would prefer. There is some very specific paperwork that has to get completed for ISEF so don't just start collecting data without some pretty detailed feedback.