

AP[®] Statistics
Common Summer Assignment
Pinellas County Schools

This assignment was determined by the collective team of AP Statistics teachers in order to increase your perspective on statistics.

Should you have questions or if you would like support with this assignment, please refer to your PCS student email account for information about the AP Summer Assignment Support Sessions (AP SASS) that will be held July 31-August 1 at various locations. You can access your student email account by going to www.office.com and using your PCS username and password to login.

Please take the time to be accurate and neat in the presentation of your work.

1. Please watch the following Ted Talk videos and answer the questions provided.

Alan Smith: Why you should love statistics

https://www.ted.com/talks/alan_smith_why_we_re_so_bad_at_statistics

Mona Chalabi: 3 ways to spot a bad statistic

https://www.ted.com/talks/mona_chalabi_3_ways_to_spot_a_bad_statistic

Malte Spitz: Your phone company is watching

https://www.ted.com/talks/malte_spitz_your_phone_company_is_watching

Malcolm Gladwell: Choice, happiness and spaghetti sauce

http://www.ted.com/talks/lang/eng/malcolm_gladwell_on_spaghetti_sauce.html

2. Please complete the All About Me Data Collection Activity on the last page of this packet.

Ted Talk Videos and Questions

3. Respond to each question thoroughly (written or typed). Your responses may include personal opinions and connections to prior knowledge.
4. Of the four talks you watched, which did you find most engaging and why? Please cite specific reasons.
5. In Alan Smith's talk, "Why you should Love Statistics", he mentioned his concern about Numeracy literacy in adults. Pick a side and make an argument for or against the need for adults to have basic numeracy given modern technology.
6. Smith's talk centered on the misperception of certain statistics and why that was a concern. Given the current political climate does this seem like a relevant concern? Please give examples.
7. What were Mona Chalabi's 3 ways to spot a bad statistic? Did you have any questions about those points?
8. Why did Chalabi believe it important that the government continued to collect data and calculate statistics?
9. Explain Malte Spitz's thesis of Self Determination in the digital Age.
10. Comment on Spitz's statement, "Having access to your information can lead to controlling the society."
11. In Mr. Gladwell's video, it mentions the need to "Ask the right questions." Specifically what was he referring to and how does that relate to statistical data collections.
12. In Mr. Gladwell's video, there is mention of a "mountain of data" and the necessary analysis. Explain your best understanding of what he explains to the audience. Include any statistical measures that seem appropriate to his study.
13. In Mr. Gladwell's video, what does the term "Experimental Design" mean? (in reference to Mr. Gladwell's description of Howard Moskowitz's work and in other real-life data collections).
14. Beyond the videos, what additional studies can you find or recall that have resulted in business decisions that were made based upon the data. Use web resources, parent conversations, your workplace, etc. to learn more about data analysis (sometimes called quality control, risk management, data mining.)
15. Did any of these talks spark an interest in something you would like to learn more about? If so what and why?
16. From what you already know about statistics, data, and dissemination of data, what would you like to learn more about and/or what questions do you have that you might like to explore this year?

“All about Me” Data Collection Activity

- give an estimate first (if appropriate), then go measure, time or count

Data	Estimate	Actual	Information
Age (as of Sept 1, 2018 to the nearest 1/2 year)	n/a		
Height (in inches to the nearest half inch)			
Number of TV's in household			
Number of phones in household			
Number of Pets in household ((identify whether they are dogs, cats, birds etc. in the last column)			
Distance from School (in miles to the nearest half mile)			
Number of Siblings (list names in the last column)	n/a		
*Number of Pairs of Shoes-Student			
*Number of Pairs of Shoes –Mother (or female family member)			
*Number of Pairs of Shoes-Father (or male family member-(specify which in the last column)			
Number of ADV Courses this year	n/a		
Number of Sports you play	n/a		
Number of Books you read this summer			
Number of US States you have ever visited			
Length of time in shower (yes! Time yourself)			