



## WEEK AT A GLANCE

# August 12<sup>th</sup> to August 16<sup>th</sup>

**Monday:** Unit 1 Vocab Quiz and What are My Classmates Like Learning Task

Learning Target: I am learning how to collect and analyze data.

Success Criteria: I can list the variables in a data set and classify them as either categorical or quantitative.

- 1) Unit 1 Descriptive and Inferential Vocab Quiz

### ***Vocabulary for Unit 1: Descriptive and Influential Statistics***

1. simulation: a way to model random events, such that simulated outcomes closely match real-world outcomes
2. trial: a single performance of a well-defined experiment
3. experiment: a treatment is deliberately imposed on individuals in order to observe their responses
4. treatment: a specific experimental condition applied to the subjects of an experiment
5. observational study : individuals are observed and variables of interest are measured without any attempt to influence responses
6. sample space: the set of all possible outcomes of a statistical experiment
7. probability: A number between 0 and 1 used to quantify how likely something is to happen
8. percentile: a number between 0 and 100 that indicates the percent of a distribution that is equal to or below it
9. population: the entire pool from which a statistical sample is drawn
10. parameter: a numerical characteristic of a population
11. sample: a small part or quantity intended to show what the whole is like
12. statistic: a numerical characteristic of a sample
13. Law of Large Numbers: the more repetitions that occur, the proportion of times that a specific event will occur approaches a single value
14. primary data: data that is collected by a researcher from first-hand sources
15. secondary data: data gathered from studies, surveys, or experiments that have been run by other people

- 2) “What are My Classmates Like?” Task from ILP- A Framework for Statistical Reasoning  
[Framework-Satistical-Reasoning-Advanced-Algebra-Unit-1 \(gadoe.org\)](#)
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**Tuesday:** “What are My Classmates Like?”

Learning Target: I am learning how to graph quantitative data.

Success Criteria: I can determine a five-number summary and create a boxplot with univariate quantitative data.

- 1) Work on What are My Classmates Like? Learning Task

[Framework-Satistical-Reasoning-Advanced-Algebra-Unit-1 \(gadoe.org\)](#)

Create a frequency chart and construct a boxplot for your chosen quantitative variable of interest and list the five-number summary.

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**WEDNESDAY:** Social Media Preferences Learning Task

Learning Target: I am learning how to graph data.

Success Criteria: I can construct and interpret histograms and bar charts.

- 1) Work on Social Media Preferences Learning Task

[Framework-Satistical-Reasoning-Advanced-Algebra-Unit-1 \(gadoe.org\)](#)

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**THURSDAY:** Which Cellphone Speaks to You Task?

Learning Target: I am learning how to collect and analyze data

Success Criteria: I can use appropriate vocabulary, plan simulations and collect & display data in graphs.

[Framework-Satistical-Reasoning-Advanced-Algebra-Unit-1 \(gadoe.org\)](#)

**Study Guide for Assessment on Friday**

Practice & Review on Collecting and Analyzing Data for Advanced Algebra Name: \_\_\_\_\_

I. Determine whether the following situations would use primary or secondary sources. Justify your response.

1. A newspaper publishes Algebra EOC scores of all high schools in the area.

2. A data call center researcher contacts likely voters to answer survey questions about an upcoming election.

II. Short answer.

3. A job recruiter estimates that 1 in 10 applicants will be qualified for a position at a large U.S. Company. Explain how you could perform a simulation to estimate the number of qualified individuals out of every 25 applicants for this job.

III. Determine whether the following variables are categorical or quantitative. Justify your response!

4. SAT Scores of High School Seniors

5. High school freshman's favorite subject

IV. Mrs. Ginn's first period's heights, in inches, is listed below. Calculate a five-number summary then construct a boxplot to display the data.

59, 71, 62, 69, 65, 64, 65, 71, 69, 68, 69, 63, 68, 62, 67, 68, 65

6. The five-number summary is \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

7. Sketch the boxplot below. Be sure to label and scale the axis appropriately!

IV. The student council conducts a student survey to find out what the favorite elective course is among the

students at your school. The results are in the table below:

8. Construct a bar chart to display the data.

9. Write a few sentences about what the data tells you.

10. What percent of students preferred Art? Show calculations and round to the nearest tenths!

Personal Finance Cyber Security & Technology Teaching Art Chorus/Band Culinary Arts Other

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**FRIDAY:** Quiz on Analyzing and Collecting Data Assessment

Learning Target: I am learning how to collect and analyze data.

Success Criteria: I can use appropriate vocabulary, plan simulations and collect & display data in graphs

**Assessment over topics on Study Guide from Thursday**