



Algebra I

4th Grading Period (7 days)

Power Objective:

- Summarize, represent and interpret data on a single count or measurement variable. (P.O. #8)

Academic Vocabulary:

- combination
- event
- matrix
- outcome
- measure of central tendency
- outlier
- permutation
- probability
- quartile
- sample space

Data Analysis and Probability

Enduring Understandings:

- Sampling techniques are used to gather data from real-world situations. If the data are representative of the larger population, inferences can be made about that population. Biased sampling techniques yield data unlikely to be representative of the larger population. Sets of numerical data are described using measures of central tendency and dispersion.
- The most appropriate data representation depends on the type of data-quantitative or qualitative, and univariate or bivariate. Line plots, box plots, and histograms are different ways to show distribution of data over a possible range of values.
- [See below for more enduring understandings.](#)

Essential Questions:

- How can collecting and analyzing data help you make decisions or predictions?
- How can you make and interpret different representations of data?
- How is probability related to real-world events?

Enduring Understandings:

- Probability expresses the likelihood that a particular event will occur. Data can be used to calculate an experimental probability, and mathematical properties can be used to determine a theoretical probability. Either experimental or theoretical probability can be used to make predictions or decisions about future events. Various counting methods can be used to develop theoretical probabilities.