Probability and Statistics Power Standards

- The student will describe data using box-and whisker plots, stem-and-leaf plots, histograms, scatterplots, and calculate percentiles.
- The student will describe data using mean, median, mode, standard deviation, range, and quartiles.
- The student will show how to successfully display data and understand how data and graphs can be misleading.
- The student will design simple experiments and explain the impact of sampling methods and bias.
- The student will calculate probabilities using tree diagrams, counting principles, permutations, and combinations.
- The student will use simulations to predict probabilities and convert them to odds.
- The student will use Venn diagrams to describe unions, intersections, independence, compliments of an event, and conditional probabilities.
- The student will know the effects outliers have on the measures of central tendency.
- The student will be able to identify mutually exclusive and independent events.
- The student will understand binomial distribution and apply it in an experiment.