



6th Grade Unit 1: Exploring Real-Life Phenomena through Statistics



Overview:

This first unit of sixth-grade math will introduce students to the study of statistics. Students will experience how to design simple experiments and collect data and learn what constitutes a statistical question. Additionally, students will collect, analyze, and display data through several graphical representations and understand how statistics affect daily life.

Learning Targets:

In Unit 1, students will:

- Describe and interpret the center of a distribution (mean through fair-share)
- Summarize numerical and categorical data using number lines (dot plots, histograms, box plots) and bar graphs
- Interpret numerical data to answer statistical investigative questions
- Distinguish between questions that are statistical and those that are not, and write statistical investigative questions
- Describe the distribution of data including its center, variability, and overall shape
- Design simple experiments and collect data
- Draw conclusions about data, compare sets of data, and make predictions
- Relate the choice of measures of center and variability to the shape of the data distribution
- Describe the impact of deleting or inserting data points on the mean and median of a data set
- Create dot plots or box plots to examine the impact of deleting or inserting data points

Key Vocabulary: (linked to GA DOE Interactive Glossary)

Box Plot	Categorical Data	Distribution	Dot Plot
Frequency	Histogram	Interquartile Range	Maximum Value
Mean	Measures of Center	Measures of Spread	Median
Minimum Value	Mode	Numerical Data	Outlier
Range	Statistical Question	Statistics	Symmetrical
Non-Symmetrical	Variability		

Supporting Resources:

<http://ctlslearn.cobbk12.org/>

<https://gavirtual.instructure.com/courses/34329>

[Mean vs Median](#)

[Measures of Variability | Definition, Formula, & Examples](#)

[Mean Absolute Deviation \(MAD\): What It Means](#)

[Mean, Median, Mode, and Range](#)

