Core Content

Cluster Title: Summarize and describe distributions.
Standard: 5. Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations.
MASTERY Patterns of Reasoning:
Conceptual: Understand what an observation is (e.g. sample size, n size) and how it relates to numerical data sets. Understand and explain why the number of observations is important to summarizing numerical data sets. **Procedural:** Find and report the total number of observations given a plot. **Representational:** Show where the number of observations is or can be represented in a data display (line plot, histogram, box plot) and explain why that representation is efficient or not efficient.

Supports for Teachers

Critical Background Knowledge
Conceptual: Understand how to collect data. Understand how to find data sets in media such as newspapers and webpages. **Procedural:** Be able to count the number of observations. **Representational:** Represent data in line plots, histograms, and box plots.
Academic Vocabulary and Notation
Data set, n - size, Observation, Sample size

Instructional Strategies Used	Resources Used
Show examples of plots and ask students to find the total observations. Be sure to clarify the difference between intervals and observations.	http://www.ade.az.gov/standards/math/2010MathStandards/Gradelevel/MathGr6.pdf page 39

Assessment Tasks Used	
Skill-based Task Students will find total observations given different plots.	**Problem Task** Have students use data found in newspaper or other media to interpret total number of observations in that data set. Have them explain why the number of observations is important for that set of data.