



### Analyzing Data Sets

#### Today's Standard

HSS.ID.A3 - Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

#### Real-World Applications for this Standard

Analyzing survey results to identify trends.; Comparing test scores to see the impact of different study methods.; Evaluating business sales data to determine the effect of promotions.; Interpreting weather data to understand climate patterns.; Analyzing sports statistics to improve team performance.

#### Today I Learned

Today, we learned about how to look at data sets and understand their differences. We talked about shapes, centers, and spreads of data and how some data points might be very different from others, called outliers.

#### Common Stumbling Blocks

Sometimes, kids think that outliers, those very different data points, should always be removed. But, sometimes they tell us important things! Another tricky part is thinking the average (mean) is always the best way to look at data, but sometimes the middle number (median) or the most common number (mode) is better.

#### Quiz Me

- What is an outlier?
- When should we keep an outlier?
- What is the mean?
- What is the median?
- What is the mode?

#### Help Me

When we look at data, we can see different patterns and information. For example, when we check how much it rains each month, we might see that some months have a lot more rain. Those months are outliers. Understanding these helps us make better decisions, like knowing when to carry an umbrella.

