

Cornell Mote

## **Statistical Inferences**

## Today's Standard

HSS.IC.A1 - Understand statistics as a process for making inferences about population parameters based on a random sample from that population.

Cues	Notes
What is statistical inference?	Statistical inference involves making conclusions about a population based on sample data.
Why is random sampling	
important?	Random sampling ensures that every member of the population has an equal chance of being selected, leading to more reliable inferences.
What is a common misconception about sample size?	A common misconception is that larger sample sizes always lead to more accurate results; however, the sample must also be representative.
How can we differentiate between correlation and causation?	Correlation indicates a relationship between two variables, but it does not imply that one variable causes the other.

## Summary

Statistical inference is the process of drawing conclusions about a population from a random sample. Understanding the importance of random sampling and the difference between correlation and causation is crucial.