# Random Sampling and Inferences

## Today's Standard

7.SP.A1 - Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

| Cues | Notes |
|---|---|
| What is random sampling? | Random sampling is a method where every member of the population has an equal chance of being selected. |
| Why is a representative sample important? | A representative sample accurately reflects the characteristics of the population. |
| How can we avoid bias in sampling? | Bias in sampling can be avoided by using random sampling methods. |
| What is a population? | A population is the entire group that we want to learn about. |
| How do we make inferences from samples? | Inferences from samples are conclusions about the population based on the data collected from the sample. |

## Summary

Random sampling is crucial for making accurate inferences about a population. A representative sample avoids bias and ensures valid conclusions.