

Why?**Essential Questions**

1. How do we apply the knowledge of confidence intervals to populations?
2. How can we infer knowledge about a population?
3. How is the sample size important?

Enduring Understanding

Students will be able to make inferences about populations in which the mean and standard deviation are unknown.

MCPS Indicators and Standards**What?**

1. Use confidence intervals and hypothesis testing to conduct tests of significance for a proportion and for a mean.
2. Use confidence intervals and hypothesis testing to conduct tests of significance for the difference between two proportions and for the difference between two means.
3. Discuss the impact of sample size on tests of significance.
4. Select the correct statistical test for a specific problem.
5. Use the Chi-square test to determine independence in two-way tables and goodness of fit for a distribution.
6. Apply the concept of inference to linear regression models.

