**Steps in Significance Testing**

Null Hypothesis: (observed differences due to chance error; population parameter = value)

Alternative Hypothesis: (observed differences real; population parameter ≠ value)

Box Model: (create assuming the null hypothesis)

Test Statistic: (expected values come from the null hypothesis)

P-value: (chance of a test statistic at least as extreme as the one observed by assuming the null hypothesis)

Conclusion: (reject null hypothesis if test statistics is less that 5%)