

## **Practice: Fitting a Model with Categorical Predictors**

Open the file VSSTeamData.jmp in JMP. Make sure that the five outliers for Yield have been hidden and excluded.

- 1. Select **Analyze**, **Fit Model** to fit a model for **MFI** and use all of the continuous predictors (**SA** through **Ambient Temp**), with both **Quarry** and **Shift**, as model effects.
  - a. Quarry is a three-level categorical variable. How many coefficients for Quarry are reported in the Parameter Estimates table?
  - b. Is either **Shift** or **Quarry** a significant predictor of **MFI**?
  - a. Two coefficients are reported. The k-1 coefficients are reported for categorical predictors, where k is the number of levels. 3-1 = 2.
  - b. No, neither categorical predictor is significant (given the other predictors in the model). The *p*-value for **Shift** is 0.608, and the *p*-value for **Quarry** is 0.628.

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