Study Guide

Scientific Method made simple…

Variable: any factor, trait, or condition that can be found in differing amounts or types.

3 kinds of variables: Independent, dependent, control

**I**ndependent: **I**!!! This is the variable that a scientist, or **I**, can change. Most experiments have only one **I**ndependent variable. As **I** change the **I**ndependent variable, **I** watch or observe what happens to the dependent variable!

The scientist watches to see how the changes he makes, affects the dependent variable. So, the dependent variable depends on the independent variable.

Example: As I pour ketchup (Independent), I watch to see how much-quantity (dependent) ketchup comes out. The quantity of ketchup flowing changes in response.

Controlled variables are constants. When I pour the ketchup, I want to make sure that I am the one pouring it at all times. I want to make sure each bottle has the same amount of ketchup. I want to hit each bottle three times.

My Independent variable will be the type of ketchup I use.

My hypothesis is…Heinz ketchup is the thickest ketchup.