

## Experimental Design:

- Uses Scientific Method
- Tests a hypothesis to solve a problem
- Requires 2 groups:
  - Control Group:
    - Standard for comparison
    - not experimented on
  - Experimental Group:
    - is experimented on
    - Differs by 1 variable  
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- Includes variables or factors
  - Controlled variables:  
Factors that stay the same between groups
  - Independent variable:
    - single factor that is changed by experimenter
    - what is being tested
  - Dependent variable:
    - factor that is observed & measured
    - data / results from lab (outcome)

## Drawing Conclusions:

- Theory
  - Statement of what is thought to be true & is supported by continual evidence  
ex. CFC's are destroying the ozone layer
- Law
  - relationship in nature that occurs over & over again  
ex. Newton's law of gravity