

# Lab 1: The Process of Science

pp. C3-C11: Be sure to fill out Activities I-VIII and review all definitions.

## GOALS:

- Identify the steps of the scientific method and give examples of each step.
- Describe the components of an appropriate scientific experiment.
- Use some common statistics to display experimental results.
- Describe the methods and results of your experiment.

## KEY TERMS:

hypothesis

theory

independent variables

dependent variables

constants

experimental treatment

replicates

sample size

mean (be able to calculate)

median (be able to calculate)

control treatment

## Calculate the mean and the median for the following data:

Student	Exam 1
1	95
2	94
3	91
4	25
5	90
6	20
7	92
8	95
9	93
10	96

Mean=

Median=

Student	Exam 2
1	20
2	99
3	98
4	25
5	27
6	20
7	90
8	22
9	97
10	96

Mean=

Median=

### **For exam 1:**

-In this situation, is the mean a good representation of the class scores? Why or why not?

-In this situation, is the median a good representation of the class scores? Why or why not?

### **For exam 2:**

-In this situation, is the mean a good representation of the class scores? Why or why not?

-In this situation, is the median a good representation of the class scores? Why or why not?

**Reminder----NO LAB NEXT WEEK. In 2 weeks, we will meet in front of Corey Union for our field trip to Hoxie Gorge. Be on time, dress for a walk in the woods, bring your lab manual and be prepared to take notes.**