

## **SCIENTIFIC METHOD AND SAFETY STUDY GUIDE**

**Your test will consist of 28 questions. Questions will be: multiple choice (1pt.), short answer(2pts.), and an extended response question.(4pts.)**

**Some terms you are going to want to be familiar with:**

**HYPOTHESIS**

**DATA**

**VARIABLE**

**CONTROL GROUP**

**THEORIES**

**INDEPENDENT VARIABLE**

**DEPENDENT VARIABLE**

**PLACEBO**

**INFERENCE**

**Be sure you understand the scientific method and all of the steps.**

**We have talked about the pages in your binder which are the most crucial to understand.**

**Be sure to use your in class study time to your advantage...I am here to answer any question you may have. You will have the entire period to work on your test, so bring other work in case you finish early.**

**On the back are 10 true false statements. If you can go 10 for 10 on these statements, you are in pretty good shape for the test.**

**Indicate whether each statement is TRUE or FALSE. If it is false, correct it to make the statement true.**

1. The first step in the scientific method is to form a hypothesis.
2. If I were testing which hand soap cleaned my hands the best, the variable I would change would be the soap.
3. Scientist test their hypothesis when analyzing results.
4. Data is another way of saying "Recorded Observations".
5. We call the variable we change in an experiment the dependent variable.
6. When performing an experiment, you set up a control group and experimental group. The experimental set up contains the changed variable.
7. The conclusion is the testable prediction a scientist is trying to answer.
8. Inference means an interpretation of an observation using both evidence and your knowledge.
9. In a controlled experiment, all variables are constant except one.
10. In an experiment, the one factor being tested is the experiment.