

### Scientific Method

A \_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_.

### Steps of the Scientific Method

- Making \_\_\_\_\_ that lead to a \_\_\_\_\_.
- Forming a \_\_\_\_\_ to answer the \_\_\_\_\_.
- Testing the \_\_\_\_\_ by \_\_\_\_\_.
- Making a \_\_\_\_\_ based on the results of the \_\_\_\_\_.

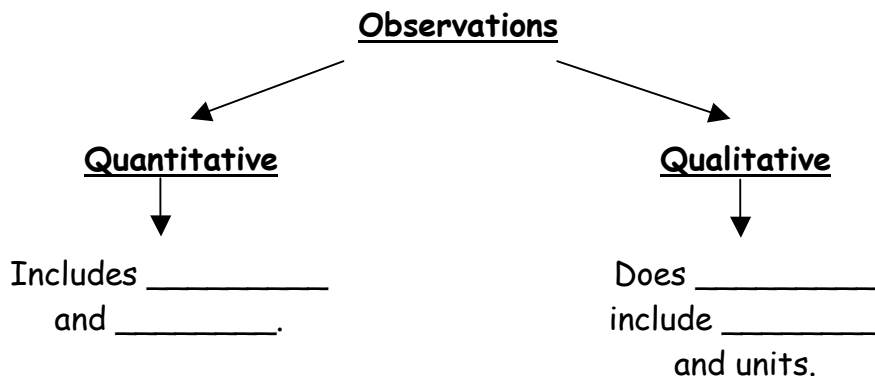
### Definitions:

**Observing:** Use of the \_\_\_\_\_ and \_\_\_\_\_ in the lab to  
\_\_\_\_\_.

**Conclusion:** A statement based on \_\_\_\_\_ and prior \_\_\_\_\_.

### Observations Vs. Conclusions

- |          |          |          |          |
|----------|----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ | 4. _____ |
| 5. _____ | 6. _____ | 7. _____ | 8. _____ |



### Qualitative Vs. Quantitative

- |          |          |          |          |
|----------|----------|----------|----------|
| 1. _____ | 2. _____ | 3. _____ | 4. _____ |
| 5. _____ | 6. _____ | 7. _____ | 8. _____ |

**Hypothesis:** an \_\_\_\_\_.

A good hypothesis:

1. \_\_\_\_\_ an \_\_\_\_\_
2. can be \_\_\_\_\_
3. will \_\_\_\_\_ an \_\_\_\_\_

**Practice forming a hypothesis:**

1. What is the \_\_\_\_\_ of the \_\_\_\_\_?
2. As the candle \_\_\_\_\_, it gets \_\_\_\_\_. Where does the \_\_\_\_\_ go?

**Experiment:**

- a. is \_\_\_\_\_ to \_\_\_\_\_ a \_\_\_\_\_.
- b. involves \_\_\_\_\_.
- c. is performed under \_\_\_\_\_.

**Variables:** factors that can be \_\_\_\_\_.

Control: a \_\_\_\_\_ that is held \_\_\_\_\_.

In a good experiment:

- a. only \_\_\_\_\_ are allowed to \_\_\_\_\_.
- b. the \_\_\_\_\_ (or \_\_\_\_\_) \_\_\_\_\_ is changed by the \_\_\_\_\_.
- c. the \_\_\_\_\_ (or \_\_\_\_\_) \_\_\_\_\_ changes as a result of the \_\_\_\_\_.
- d. all other \_\_\_\_\_ are \_\_\_\_\_ because they are held \_\_\_\_\_.

### The Chemistry Quiz

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

**CHEMISTRY:** A Study of Matter

© 2004, GPB

1.2