Lesson 4: Scientific Method

A _____ _____ of _____

_____.

Steps of the Scientific Method:

1. Making _____ that lead to a _____.
2. Forming a _____ to answer the _____.
3. Testing the _____ by _____.
4. 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. _____

Observations:

Quantitative	**Qualitative**
Includes _____ and _____.	Does _____ include _____ and units.

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:

1. is _____ to _____ a _____

2. involves _____

3. is performed under _____ _____

Variables: factors that can be _____.

Control: a _____ that is held _____.

In a good experiment:

1. only _____ _____ are allowed to _____.
2. the _____ (or _____) _____ is changed by the _____.
3. the _____ (or _____) _____ changes as a result of the _____.
4. all other _____ are _____ because they are held _____.

The Chemistry Quiz:

1. _____ 2. _____ 3. _____ 4. _____ 5. _____