Use your interactive notebook to answer the following questions.  **Answer in complete sentences unless asked to make a list.**

Make sure your Table of Contents is up to date. Due on Thursday, September 20th.

1. How are repetition and replication different? Why are they both important in an experiment?
2. Why is lab safety important?
3. LIst two types of sciences and methods they use gather information for explanation.
4. Define qualitative and quantitative and give an example for each.
5. What lenses on the Light Microscope are used to change the magnification of an object?
6. What happens to an object when the magnification increases?
7. Does Gold Grow on Trees? How is this happening?
8. How do test variables, outcome, and control variables differ?( Identify what they do and give another name for each variable.)
9. What is the difference between a scientific theory and a scientific law?
10. Can a scientific theory change over time? Why?
11. List 2 examples of scientific theory and scientific law.
12. Why do scientists use models?
13. .Describe the two main types of scientific models.
14. List a benefits of using models.
15. List a limitations when using models.

**Underline the IV (what is the experimenter changing) and circle the DV (what is being measured) and then write your hypothesis in an “If , then” format. Avoid the use of the word I.**

1. Can reading small print cause a headache?

 Hypothesis: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Does the amount of iron in the water affect plant growth? Hypothesis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Can plant growth be increased by increasing the brightness of the light?

 Hypothesis: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 19. List the steps in the Scientific Method.