Inquiry Test Study Guide

1. Factors that are measured in an experiment are the <u>dependent variables</u> .
2. A testable prediction about a possible solution to a problem is called <u>hypothesis</u> .
3. A factor that is manipulated in an experiment to change the dependent variable is the <u>independent variable</u> .
4. When conducting an experiment, what can a scientist do to make the data more reliable? Conduct multiple trials; make
sure to keep necessary variables constant
5. List the steps of the scientific method in order.
1. Observing & Questioning
2. Research / background knowledge
3. Form a Hypothesis & making predictions
4. Investigate to learn more
5. Analyze
6. Form Conclusions
7. Communicate findings
6. When a scientist applies what they learn from an investigation to make something that is useful it is called
technology .
7. Why is skepticism an important part of the scientific process? <u>Causes doubt that leads to new investigations</u>
8. The process of learning more about the natural world is <u>science</u> .
9. An organized process used to gather observations and test a hypothesis is a(n) <u>controlled experiment</u> .
10. A sample that is treated exactly like the other experimental groups except that the independent variable is not applied to it is a(n) <u>control group</u> .
11. A factor in an experiment that changes from the manipulation of the independent variable is the <u>dependent variable</u> .
12. The process of gathering information through the senses is called <u>observing</u> .
13. A factor in an experiment that can change is <u>variables</u> .
14. A factor that does NOT change in an experiment is a(n) constant .
15. Identify the following statements as Qualitative or Quantitative Observations
a. The jacket is blue. Qualitative
b. The height of the plant is 6cm. Quantitative
c. The volume of the box is 105 cubic centimeters. Quantitative