**1.1 STUDY GUIDE**

1. What is science?
2. What is science not?
3. What are the goals of science?
4. Make a flowchart showing the steps in the scientific method.
5. What is a hypothesis? Give an example using an “if…then…” statement.
6. What type of experiment should you conduct to test a hypothesis? Explain your reasoning.
7. Explain the difference between quantitative and qualitative data. Give an example of each.
8. Is an experiment a failure if the data rejects (does NOT support) the hypothesis? Explain your reasoning.
9. Explain the difference between an experimental and control group. Give an example of each from the same experiment.
10. Describe the relationship between the independent and dependent variables of an experiment. Give an example.
11. Why are control variables important in an experiment?