

## 1.1 Review Questions

1. What would hit the ground first if dropped at the same time on the moon, a 3-ton car or a piece of paper?
2. How is the scientific method different than the type of investigating done previous to it?
3. What is different between a theory and a law?
4. Tell whether the following statements are theories or laws. Also tell why.
  - a. Humans and apes evolved from the same ancestor.
  - b. The earth revolves around the sun.
  - c. The atom is the smallest unit of an element that still has all of that element's properties.
  - d. Energy cannot be created nor destroyed, it can only be converted from one form to another.
5. The words "observe", "measure" and "think" can be substituted for other terms like "form a hypotheses", "experiment", "test results", "evaluate", ... What specifically is a person doing when she is using the scientific method to study something? In other words, what do you do when you observe? When you measure? When you think?
6. Why must lab reports be written?
7. When a scientist repeats a lab done by someone else, is he trying to prove a hypothesis correct? Why or why not?
8. What is different between a hypothesis and a theory?

9. State whether each of the following statements is valid or not. Also explain why.

a. Jim has a theory as to why people always lose socks in the dryer.

b. There is so much evidence these days supporting the Big Bang Theory that it will eventually become a law.