

**Scientific Method:**

- a) Describe the key steps of the scientific method.
- b) Who is credited with establishing the scientific method for inquiry of the natural world? (*Note: this is not in the textbook...*)
- c) What is the requirement for a hypothesis to be considered “scientific”?
- d) Give an example of both a scientific and non-scientific hypothesis/statement.
- e) Describe the difference(s) between a hypothesis and a theory.
- f) Describe the difference(s) between a scientific law and a theory.

**Physical States of Matter & Classification of Matter:**

- a) Identify the 3 states of matter.
- b) Succinctly describe the 3 states of matter.
- c) How is a pure substance different from a mixture?
- d) Describe the following:
  - 1. homogeneous mixture
  - 2. heterogeneous mixture
  - 3. phase