1-1 What is Science?

- Introductory Paragraph
  - Humans had many questions
  - They slowly started to use a scientific approach to explore the natural world

- What Science Is and Is Not
  - Goal of science is to:
    1. investigate & understand natural world
    2. explain events in natural world
    3. use explanations to make predictions
  - science = organized way to use evidence to learn about natural world
  - science = body of knowledge built up by scientists

- Thinking Like a Scientist
  - Scientific thinking usually starts with:
    - Observation = process of gathering information in a careful, orderly way
    - Data = information gathered from observations.
      Two types of data:
      1. quantitative (numbers)
      2. qualitative (descriptions)
  - Scientists use data to make an
    Inference = a logical interpretation based on previous knowledge or experience

- Explaining and Interpreting Evidence
  - Hypothesis = proposed scientific explanation for a set of observations
  - Hypotheses must be testable

Summary
- Science's goals = Investigate, explain, predict
- Hypotheses must be testable
- Think like a scientist (see G.O.)