Bio-3
1/14/13
Johannson
In-Class Notes

- Scientific Literacy

ch.1 - Scientific Thinking

- How do scientist do what they do?

- Learning Goals

- Describe what science is
- Describe scientific Method
- Key aspects of scientific Literacy

- Science -

- collection of facts for processing + understanding
  - application of facts for reasons
    - observation, descexperiment, application.

- Ability to predict based on previous facts.

- No personal or political beliefs or agendas.

Results-+ Conc.

- driven by well collected data
  - opposite of how the brain wants + how we want to function

- HOW DO YOU KNOW That's TRUE?
  - what's the mechanism??

THM.1.B - The scientific method is a powerful approach to understanding the world.

1.5

Scientific Method

1. Make observations
2. form hypothesis
3. testable prediction - Devise
4. Conduct experiment - critical
5. Draw conclusions make revisions

1.5

1. Make observations
   - why is this happening?
2. Formulate Hypothesis
   - a proposed explanation for phenomena - eliminate all other hypothesis.
3. Devise testable prediction
   - suggests
4. Conduct critical experiments
   - Treatment, Experimental Group, Control group, Variables - Double-Blind, Randomiz
5. Draw Conclusion + revise

- Causation vs. Correlation