**Chapter 1b**

I Critical and Scientific Thinking in Psychology

* Critical Thinking- Define
  + What are critical thinkers able to do?
  + What is it not?
  + Why is critical thinking fundamental to science?
* 8 Essential Guidelines to Critical Thinking

1. Ask Questions; Be Willing to Wonder- Explain
2. Define Your Terms- Explain
   * For scientists?
   * Hypothesis- Define
   * Operational Definition- Define
3. Examine the Evidence- Explain
   * What must a claim be backed with?
   * Give and explain Autism example?
4. Analyze Assumptions and Biases- Explain
   * What do researchers do with their own assumptions?
   * Principle of Falsifiability- Define
     + How else would you say it?
5. Avoid Emotional Reasoning- Explain
6. Don’t Oversimplify- Explain
   * Argument of Anecdote- Define
     + Example-
   * What do Critical Thinkers want?
7. Consider other Interpretations- Explain
   * Theory- Define
   * What do Critical Thinkers do before settling on an explanation?
8. Tolerate Uncertainty- Explain
   * Sometimes- 1)

2)

* + What happens in science?
  + What does this not mean?
* What is true Critical Thinking according to Richard W. Paul?