**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?