**Chapter 10: Thinking and Language**

**Chapter 11: Intelligence**

**Study Guide**

**Chapter 10**

**Thinking**

* What is cognition?
* What do cognitive psychologists study
* What are concepts and how are they formed? How do we organize conceptual information?
  + What are prototypes?
* Define algorithm and give examples
* Define insight and give an example
* What are heuristics? Think of an example for each.
  + Representative heuristic
  + Availability heuristic
* Understand the different errors we typically make in problem solving
  + Conformation bias
  + Fixations
    - Mental set
    - Functional fixedness
  + Overconfidence
  + Framing Effect
  + Belief bias and persistence

**Language**

* Define the elements of language
  + Phonemes
  + Morphemes
  + Grammar
  + Syntax
  + Semantics
* How do babies acquire language? Explain how they move through the different stages.
* What is telegraphic speech and when does it occur?

**Thinking and Language**

* What is linguistic determinism?
* What is reification?

**Animal Thinking and Language**

* Do animals experience insight? What research examines this question?

**Chapter 11**

**What is Intelligence?**

* What is factor analysis? How was it applied to research in intelligence?
* Explain Spearman’s theory of intelligence. What does his g factor refer to?
* What is Sternberg’s Triarchic Theory of Intelligence comprised of ?
* What is emotional intelligence? How does it differ from traditional views of intelligence?

**Assessing Intelligence**

* What is mental age and how is it calculated?
* Who designed the first intelligence test and what was its initial purpose?
* Be able to calculate IQ based on mental age (for ex. If a 10- year-old was found to have the mental proficiency of an 8-year-old on the Stanford-Binet what would her IQ be?)
* What is the difference between an achievement test and an aptitude test?
* What is the difference between reliability and validity?
* When IQ tests are standardized they generate a normal distribution represented by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? Understand how different score ranges relate to levels of intelligence.

**The Dynamics of Intelligence**

* What is the Flynn effect?
* How do IQ ranges vary for different groups?

**Genetic and Environmental Influences on Intelligence**

* What do twin studied reveal about intelligence?