**Study Guide**

**Chapter 7: Language & Thinking**

**Language**

1. What is the basic function of language?

What does language consist of?

2. What are two brain areas known to be involved in speech?

What is the best advice on summarizing what is known about animal use of language?

3. Describe three theories of how infants acquire language. Which one is best or most adequate? What is a *language acquisition device?* Why is behaviorist theory inadequate to explain the acquisition of language by itself?

4. What is the relationship among language, thought, and culture? In short, does language determine thought? Who came up with this idea?

**Thinking or Cognition**

5. What is cognition? What is a concept? How are they formed? What is categorization? What is a natural as opposed to a formal (definitional) concept? What is a prototype? What are fuzzy boundaries?

6. How do we determine whether an object or a person fits into a particular category?

7. What are the four common problem-solving strategies that we discussed? Could you describe or recognize an example of each one?

8. Define confirmation bias, mental set, and functional fixedness. How are they obstacles to solving problems?

9. Describe the availability and representativeness heuristics.

10. You should be able to recognize the conditions that lead people to use heuristics. In other words, “People tend to use heuristics when . . .”

**Intelligence**

1. Why were Sir Francis Galton and other supporters of eugenics interested in intelligence testing?

2. Who wrote the first IQ test, where and why? What did he assume about intelligence differences?

3. What is the difference between aptitude and intelligence tests?

4. Why is IQ called IQ? How is it calculated today? What is test standardization? Why is it done? What do the scaled scores always represent regardless of the scale used? What is always the number or score which represents the average or 50th percentile on an IQ test?

5. What is test validity? What are the validity problems of an IQ test?

6. What is the most commonly used IQ test today?

7. Who believed that intelligence was a general ability or g-factor?

8. What are multiple intelligences, and who proposed nine of them? You should be able to recognize descriptions of the nine.

9. What three kinds of intelligence did Sternberg propose? You should be able to name and describe these types of reasoning.

10. How is mental retardation defined? Are all mentally retarded people about the same in intelligence? What is a *savant*? How did studying savants lead Gardner to his multiple intelligence theory?

11. Is intelligence inherited? (nature-nurture question) What is the average correlation between IQ scores of identical twins? According to researchers best guesses, about what percentages of intelligence can be attributed to heredity and environment? Are there gender and/or racial differences in intelligence and if so, how do we explain them?

12. In the plant-pot analogy, what causes the difference in the average height of the plants in the two pots? What does that represent?

13. Does a high IQ score predict success in life? What do IQ scores predict or correlate with best?