**Unit 2**

**Modules 4-8**

**Pages 36-71**

Answer the following questions in complete sentences and in a spiral-bound notebook. All responses should be hand-written (not typed) unless otherwise indicated. You do not need to rewrite the question, but should indicate the Module number and question number for each response. **Bold-faced** words should be used within answers where appropriate. This assignment is due the first day of class.

MODULE 4

1. What is hindsight bias? What is one example from your life that might be or, definitively is, hindsight bias?
2. Provide an example of overconfidence from the text.
3. Why is it hard to generate random sequences?
4. Why do we overestimate the value of common sense thinking?

MODULE 5

1. What is the difference between a theory and a hypothesis?
2. Create your own example of an operational definition.
3. Why might researchers consider replication the most important goal of research?
4. What are the benefits and drawbacks of each type of research: case study and naturalistic observation? What do they have in common?
5. What is a benefit and drawback to the survey research method? What are two common issues that arise when conducting this type of research?
6. What is the difference between a random and representative sample?

MODULE 6

1. What is the difference between a positive and negative correlation?
2. Identify an example where correlational research would be used instead of an experiment.
3. Why do correlations enable predictions but not cause and effect explanation?
4. What is the connection between correlation and regression toward the mean?
5. In one sentence, what can an experiment do that other methods of research cannot?
6. Describe your own made up experiment and identify each of the following: experimental group, control group, random assignment, independent variable and dependent variable.
7. Explain the relationship between a double-blind procedure and the placebo effect.

MODULE 7

1. How would you know which research design to use?
2. What is the benefit to simplified laboratory research?
3. Identify the four components of APA’s ethics code for human research?
4. How do values affect psychological science?

MODULE 8

1. Why should we doubt statistics reported as really big, round numbers?
2. What is a histogram? What is its purpose?
3. What is a skewed distribution?
4. How can the mean and median skew results and/or describe the same data differently?
5. Why is it important to know how scores vary in data sets? What is the best way to determine score variation? How can the same average in two AP Psych classes tell a different story about the achievement level of all students?
6. Memorize the percentage distribution for a normal curve.
7. What is the difference between reliability and validity?
8. How do we know whether an observed difference can be generalized to other populations?