Chapter 1:

Learning Objectives:

The need for Psychological Science:

- 1. Describe *hindsight bias*, and explain how it can make research findings seem like mere common sense.
- 2. Describe how overconfidence contaminates our everyday judgements.
- 3. Explain how the scientific attitude encourages critical thinking.
- 4. Describe how psychological theories guide scientific research.

Description:

- 5. Identify an advantage and a disadvantage of using case studies to study behavior.
- 6. Identify the advantages and disadvantages of using surveys to study behavior and mental processes, and explain the importance of wording effects and random sampling.
- 7. Identify an advantage and a disadvantage of using naturalistic observation to study behavior.

Correlation:

- 8. Describe positive and negative correlations, and explain how correlational measures can aid the process of prediction.
- 9. Explain why correlational research fails to provide evidence of cause-effect relationships.
- 10. Describe how people form illusory correlations.
- 11. Explain the human tendency to perceive order in random sequences.

Experimentation:

- 12. Explain how experiments help researchers isolate cause and effect.
- 13. Explain why the double-blind procedure and random assignment build confidence in research findings.
- 14. Explain the difference between an independent and a dependent variable.

Statistical Reasoning:

- 15. Explain the importance of statistical principles, and give an example of their use in everyday life.
- 16. Explain how bar graphs can misrepresent data.
- 17. Describe the three measures of central tendency, and tell which is most affected by extreme scores.

- 18. Describe two measures of variation.
- 19. Identify three principles for making generalizations from samples.
- 20. Explain how psychologists decide whether differences are meaningful.

Frequently Asked Questions About Psychology:

- 21. Explain the value of simplified laboratory conditions in discovering general principles of behavior.
- 22. Discuss whether psychological research can be generalized.
- 23. Explain why psychologists study animals and discuss the ethics of experimenting with b of animals and humans.
- 24. Describe how personal values can influence psychologists' research and its application, and discuss psychology's potential to manipulate people.