SOLUTIONS FOR REVIEW EXERCISE 1

Psych 105 N. Lucas

- Although descriptive research can suggest hypotheses for further study, it is limited to describing behavior and cannot reveal predictive, or cause-effect, relationships. One possible pitfall of case studies is that any given individual may be atypical, making the case misleading. Survey results may be misleading because even subtle changes in the order or wording of questions can influence responses. And the samples on which surveys are based may not be representative of the populations from which they are drawn.
- 2. A perceived correlation that does not really exist is an illusory correlation. Illusory correlations help explain superstitious beliefs; they arise from our eagerness to perceive order in events, even those that are random.
- 3. Each neuron consists of a cell body, branching fibers called dendrites that receive information from other neurons, and an extension fiber called an axon through which the neuron passes information to other neurons or to muscles or glands. Some axons are insulated with a myelin sheath, which helps speed neural impulses.

A neural impulse, or action potential, occurs if the excitatory signals minus the inhibitory signals received by the neuron on its dendrites or cell body exceeds the neuron's threshold. Then, the gates in the axon open, allowing positively charged atoms to rush inside. This depolarizes that part of the axon, which causes the axon's next channel to open and leads to the electrical chain reaction by which electrically charged atoms (ions) travel down the axon into junctions with other neurons and with the muscles and glands of the body.

4. Matching Items: d e, a, f, g, b, c, h, k, I, j

Location items: a, h, c, d, e, b, f, g, i