Questions

- 1. What is a hormone?
- 2. Name and describe the two most common types of hormones, classified according to their molecular structure.
- 3. What are the two main mechanisms that hormones use to produce their effects in target cells?
- 4. If a particular hormone, such as the hormone that stimulates the development of facial hair, is released throughout the bloodstream, why does it not affect all the cells in the same way?
- 5. Use a graphic organizer to compare and contrast the endocrine system's methods of controlling and regulating processes in the body with the nervous system's methods.
- 6. Testosterone is a hormone derived from cholesterol. Explain how you would expect testosterone to perform its intended action in a cell.
- 7. Research a hormone whose path was not explained in this section, such as cholecystokinin (CCK), insulin, progesterone, or estrogen. Create a flow chart to explain its pathway.

- 8. Osteoporosis is a loss of bone tissue usually associated with aging. Research the hormone calcitonin and its use as a therapy and preventive agent for osteoporosis. Summarize your findings in a report. You are free to choose the format for your report. For example, you could choose to do a written report, an oral presentation, or a slide show.
- 9. Why does the imbalance of a particular hormone affect the entire body and cause so many different symptoms?
- 10. Steroid hormones bind to receptors inside cells. Why can steroid hormones diffuse into a cell while protein hormones cannot?
- 11. Use a t-chart to contrast the ways in which steroid and protein hormones
 - (a) interact with cell membranes
 - (b) get messages into cells
 - (c) cause chemical reactions
 - (d) make products K/U C
- 12. How are the target cell's activities changed if a gland produces too much of a particular hormone? Support your answer with an example.

