Chapter 10 Cell Growth and Division **Section 10-3 Review Sheet**

1. Cyclin regulates the timing of the cell cycle.
2. Internal regulators prevent a cell from entering mitosis until all chromosomes have been replicated.
3. External regulators direct cells to speed up or slow down the cell cycle.
4. The abnormal growth of cancer cells is caused by a failure to respond to signals that regulate growth.
5. No, all body cells do not have the same growth rate. For example, an injury to the skin will cause an increase in the growth rate.
6. *Answers will vary.* Scientists may have been interested in how much cyclin, or what types of cyclins are found in cancer cells.
7. Both internal and external regulators control the timing of the cell cycle. External regulators respond to stimuli outside the cell, such as contact with another cell, while internal regulators respond to signals within the cell, such as halting cell division until DNA repairs are complete.
8. A cut or injury is followed by a period of increased cell growth. After healing is complete, the cells return to a normal rate of growth.