

**Chapter 10 Cell Growth and Division**

**Section Review 10-1**

**Reviewing Key Concepts**

**Completion** *On the lines provided, complete the following sentences.*

1. The larger the cell, the more trouble it has moving water and nutrients through the \_\_\_\_\_.
2. A cell's \_\_\_\_\_ determines the rate at which it uses food and oxygen.
3. To avoid growing too large, cells regulate their size by \_\_\_\_\_.

**Short Answer** *On the lines provided, answer the following questions.*

4. What can happen if a cell were to get too large for the amount of DNA it has?

\_\_\_\_\_

\_\_\_\_\_

5. What substances must pass through a cell's membrane for the cell to continue to function?

\_\_\_\_\_

\_\_\_\_\_

6. How does a cell's ratio of surface area to volume change as the cell grows larger?

\_\_\_\_\_

\_\_\_\_\_

7. Why do cells divide?

\_\_\_\_\_

\_\_\_\_\_

**Reviewing Key Skills**

**Calculating** *Complete the following table.*

Cell	Surface Area	Volume	Ratio of Surface Area to Volume
1	42 cm <sup>2</sup>	8. _____	7:1
2	78 cm <sup>2</sup>	13 cm <sup>3</sup>	9. _____
3	10. _____	16 cm <sup>3</sup>	5:1