

Skills Worksheet

Directed Reading

Section: Regulation

Read each question, and write your answer in the space provided.

1. A scientist places a few healthy cells in a dish that contains nutrients for the cell. What happens?

2. How is the process you described in question 1 similar to what happens with a wound?

3. What are three sources of signals related to the regulation of cell growth and division?

Complete each statement by writing the correct term in the space provided.

4. Many _____ within the cell control the phases of the cell cycle.
5. Feedback signals at key _____ in the cell cycle can trigger or delay the continuation of the cycle.

Read each question, and write your answer in the space provided.

6. Describe when and how each of the checkpoints listed below functions to regulate the cell cycle.

G₁ checkpoint

When _____

How _____

Directed Reading *continued*

G₂ checkpoint

When _____

How _____

Mitosis checkpoint

When _____

How _____

7. What is cancer?

8. How do cancer cells affect healthy cells?

9. What is the reason that cancer cells do not respond properly to cell signals and controls? What is the result?

10. What is the difference between a benign tumor and a malignant tumor?

11. What are three treatments for cancer?

12. What are two things you can avoid to help prevent getting cancer?
