

Name _____ Period _____

SECTION 2-1 Photosynthesis

Fill in the blanks in the photosynthesis equation below with the names of the missing compounds. Then answer the questions that follow in the spaces provided.

1. _____ + 2. _____ $\xrightarrow{\text{sunlight}}$ 3. _____ + 4. _____

5. What are the two raw materials (reactants) of photosynthesis?

6. What are the two products of photosynthesis?

7. Why is *sunlight* written above the arrow in the equation, rather than on either side of it?

8. Where in the cell does photosynthesis occur?

Fill in the blank to complete each statement. Select from the words below.

autotroph

heterotroph

stomata

chlorophyll

pigments

photosynthesis

9. The process by which a cell captures the energy in sunlight and uses it to make food is called _____

10. _____ are colored chemical compounds that absorb light.

11. The main pigment found in the chloroplasts of plants is _____.

12. _____ are small openings on the undersides of leaves through which carbon dioxide enters a plant.

13. An organism that makes its own food is a(n) _____

14. A(n) _____ is an organism that cannot make its own food.

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SECTION 2-2 Respiration

Fill in the blanks in the table below. Then answer the questions that follow in the spaces provided.

Respiration Equation

Raw Materials (reactants)	Products
1.	3.
2.	4.
	5.

Photosynthesis Equation

Raw Materials (reactants)	Products
6.	9.
7.	10.
8. (hint: this is sometimes written over the arrow)	

11. What is fermentation? _____

12. How is fermentation different from respiration? _____

13. Which type of fermentation occurs in yeast? _____

14. Which type of fermentation sometimes occurs in people? _____

15. What is the process by which cells “withdraw” energy from glucose? _____

16. What is the energy-releasing process in cells that does not require oxygen? _____

17. What is the process that uses light energy to make glucose? _____

18. What is the chemical formula for glucose? _____

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SECTION 2-3 Cell Division

Fill in the blanks in the table below. The answer the questions that follow in the spaces provided.

Phases of Mitosis

Phase	Event
Prophase	1. _____
2. _____	Chromosomes attach to spindle fibers
Anaphase	3. _____
4. _____	New nuclear membranes form

5. Which stage of the cell cycle usually lasts the longest? _____

6. During which stage of the cell cycle does DNA replication occur? _____

7. During which stage of the cell cycle does the cell membrane pinch the cell in two? _____

Match each term with its definition by writing the correct letter in the blank.

_____ 8. regular sequence of growth and division that cells undergo a. interphase

_____ 9. first stage of the cell cycle b. mitosis

_____ 10. process in which DNA is copied c. cell cycle

_____ 11. stage of the cell cycle during which the cell's nucleus divides d. chromatid

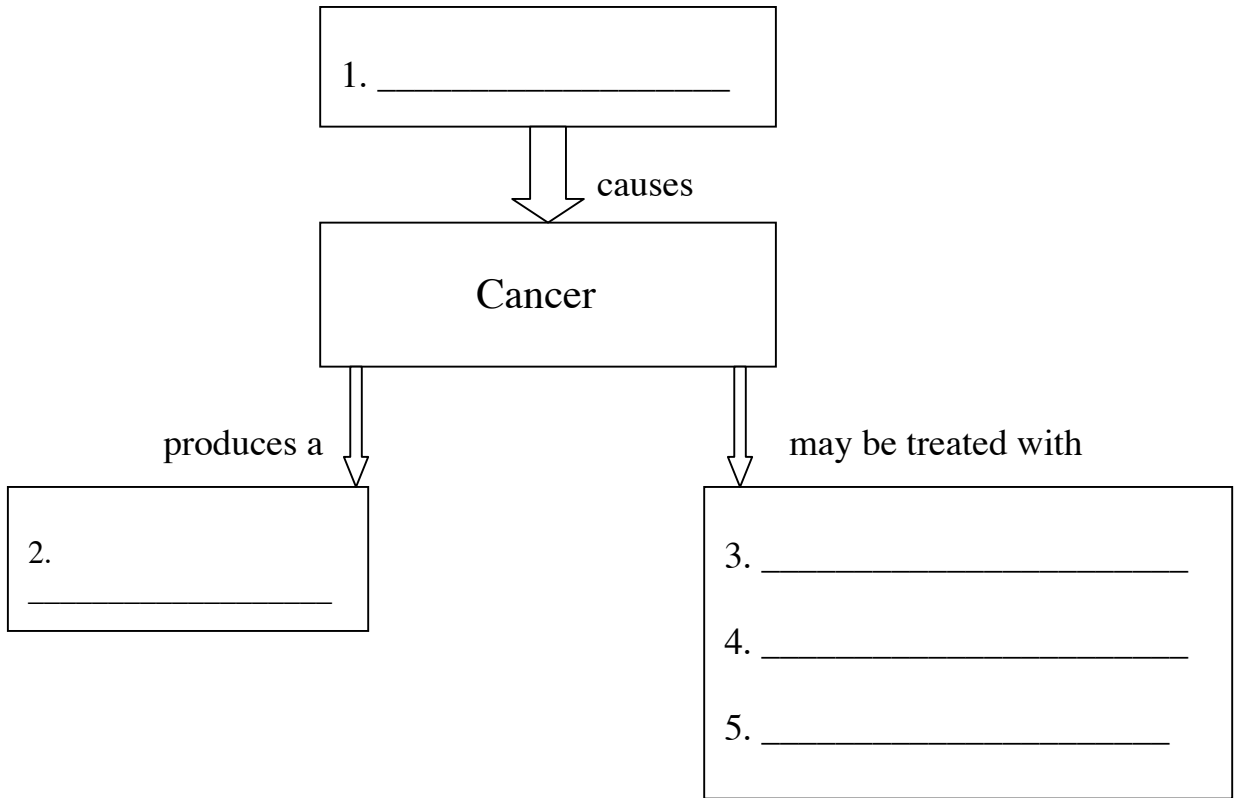
_____ 12. doubled rod of condensed chromatin e. cytokinesis

_____ 13. each identical rod of a chromosome f. replication

_____ 14. final stage of the cell cycle g. chromosome

SECTION 2-4 Cancer

Complete the concept map below. The answer the questions that follow.



6. _____ is a disease in which cells grow and divide uncontrollably.

7. A change in the DNA is called a(n) _____

8. A(n) _____ is a mass of abnormal cells.

9. The use of drugs to kill cancer cells is called _____

10. How can cancer spread from a tumor to other parts of the body? _____

11. What are two ways the risk of some types of cancer can be reduced?

A. _____

B. _____