Name Study Guide & Test Foldables Class Date

Chapter Test B *continued* Ch. 2 - The Cell in Action

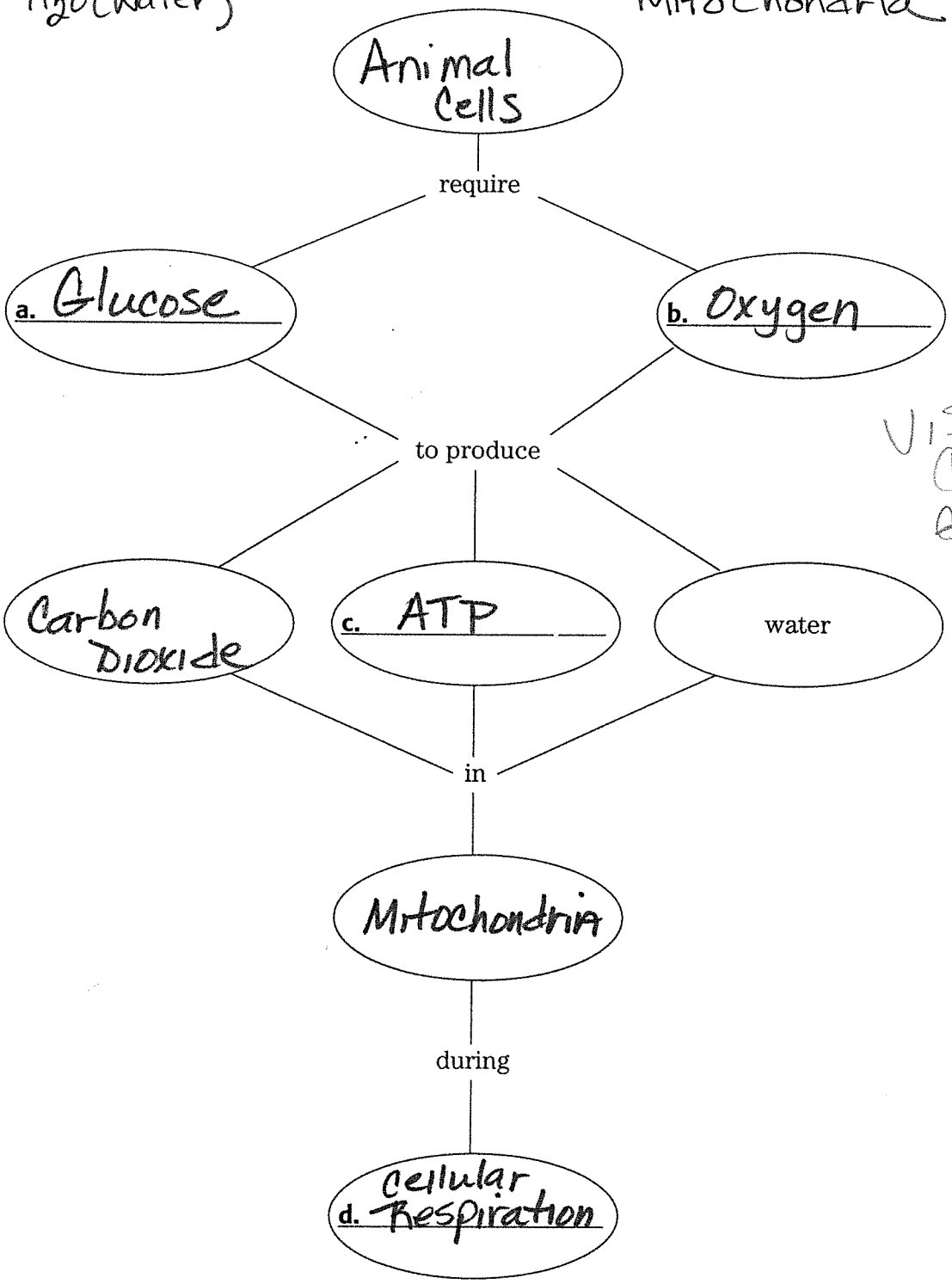
CONCEPT MAPPING

17. Use the following terms to complete the concept map below:

oxygen
glucose
H_2O (Water)

ATP
CO_2 (Carbon Dioxide)

cellular respiration
Animal Cells
Mitochondria



Visalia Camo Golden Blue

Name _____ Class _____ Date _____

Skills Worksheet

Directed Reading B

Section: Exchange with the Environment

Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

energy and raw materials	wastes
cell membrane	healthy

1. An organism must be able to take in Energy & Raw Materials.
2. Materials move in and out of a cell through its Cell Membrane.
3. Taking in energy and getting rid of wastes keep an organism Healthy.
4. An organism has to get rid of Wastes.

WHAT IS DIFFUSION?

Circle the letter of the best answer for each question.

5. What is everything, including gelatin and dye, made up of?
   - **a.** energy
   - **b.** water
   - **c.** heat
   - **d.** tiny moving particles

6. Where will particles move when they are crowded?
   - **a.** where it is warmer
   - **b.** where it is cooler
   - **c.** where it is less crowded
   - **d.** where it is cleaner

7. What do we call particles moving from crowded areas to less crowded areas?
   - **a.** diffusion
   - **b.** flowing
   - **c.** traveling
   - **d.** exchanging

Circle the letter of the best answer for each question.

8. What don't cells need for diffusion?

a. food
c. energy
b. water
d. heat

Diffusion of Water

Read the description. Then, draw a line from the dot next to each description to the matching answer.

9. The fluids in an organism's cells are made mostly of this. ● C

10. What particles that make up water are called. ● D

11. What the diffusion of water is called. ● A

12. Water moves through this during diffusion. ● B

a. osmosis
b. cell membrane
c. water
d. molecules

The Cell and Osmosis

Circle the letter of the best answer for each question.

13. What is made up of water, salts, sugars, and other particles?

a. iced tea
c. molecules
b. cell membranes
d. plasma

14. What helps keep plasma in balance?

a. cold
c. osmosis
b. heat
d. energy

15. What does osmosis bring into the cells that helps wilted plant cells?

a. energy
b. water
c. sunlight
d. heat

MOVING SMALL PARTICLES

Circle the letter of the best answer for each question.

16. How do small particles cross a cell membrane?

a. through roadways

b. through channels

c. through holes

d. through pores

17. How do particles move from low concentration to high concentration?

a. active transport

b. passive transport

c. osmosis

d. diffusion

18. How do particles move from high to low concentration?

a. active transport

b. passive transport

c. osmosis

d. diffusion

19. What is a sac formed from pieces of cell membrane called?

a. endocytosis

b. vesicle

c. cell

d. particle

MOVING LARGE PARTICLES

Use the figure below to answer questions 20 and 21. Circle the letter of the best answer for each question.

Figure A

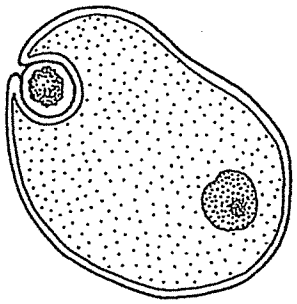


Figure B

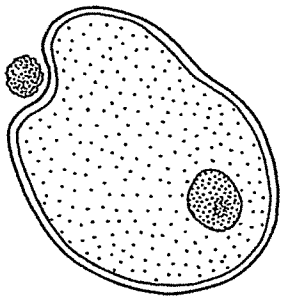
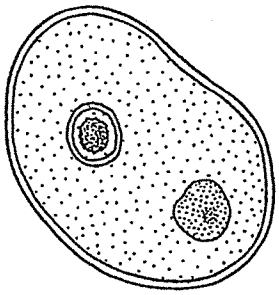


Figure C



20. Look at the figure. A cell encloses a large particle in B, A, C order. What is the name of the process?

a. exocytosis

b. endocytosis

c. osmosis

d. diffusion

21. Look at the figure. A cell encloses a large particle in C, A, B order. What is the name of the process?

a. exocytosis

b. endocytosis

c. osmosis

d. diffusion

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Skills Worksheet

Directed Reading B

Section: Cell Energy

Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

sun	food	reproduce

1. Plant cells get their energy from the Sun.

2. Many animals get the energy they need from food.

3. All cells need energy to live, grow, and reproduce.

FROM SUN TO CELL

the sun	food
energy	photosynthesis

4. Almost all of the energy used by living things comes from the Sun.

5. Plants change energy from the sun into food.

6. The process that plants use to make food is called photosynthesis.

7. Plants use the food they make for energy to live, grow, and reproduce.

Photosynthesis

Circle the letter of the best answer for each question.

8. In photosynthesis, what two things do plants use with sunlight to make food?

a. water and oxygen
c. water and carbon dioxide
b. water and sugar
d. water and salt

9. What food do plants make for themselves?

a. salt
c. chlorophyll
b. glucose
d. heat

GETTING ENERGY FROM FOOD

Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

cellular respiration	fermentation

10. Breaking down food for energy using oxygen is called
Cellular Respiration.

11. Breaking down food for energy without using oxygen is called
Fermentation.

Cellular Respiration

Circle the letter of the best answer for each question.

12. How do most complex organisms get their energy?

a. through breathing
c. through sleeping
b. through eating
d. through cellular respiration

13. In cellular respiration, what do cells use to produce energy from food?

a. water
c. oxygen
b. sunlight
d. carbon dioxide

Circle the letter of the best answer for each question.

14. Which are broken down and released in cellular respiration?

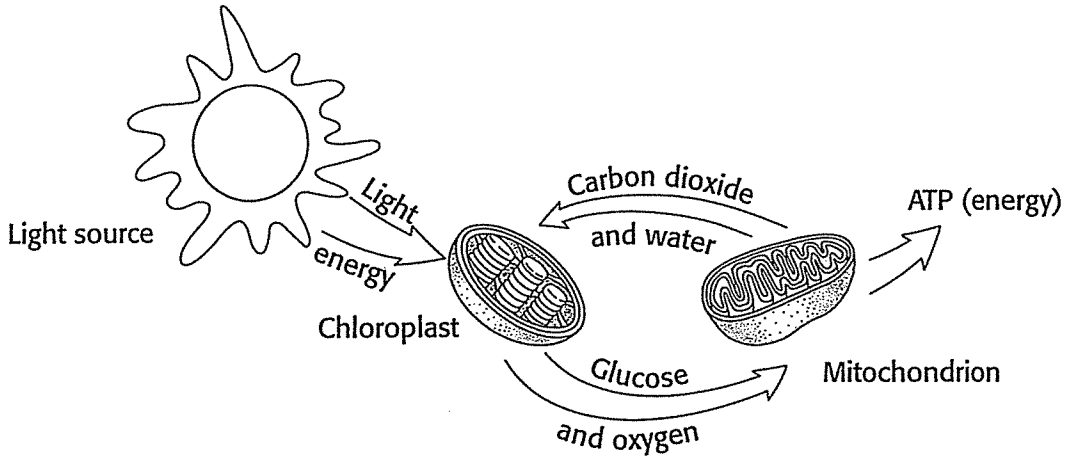
a. water, carbon dioxide, and energy

b. water, energy, and oxygen

c. water, food, and carbon dioxide

d. water, oxygen, and food

Use the figure below to answer questions 15, 16, and 17. Circle the letter of the best answer for each question.



15. Look at the figure. What two processes does it show?

a. photosynthesis and breathing

b. breathing and growing

c. growing and cellular respiration

d. photosynthesis and cellular respiration

16. Look at the figure. Where does cellular respiration take place in the figure?

a. mitochondrion

b. cell membrane

c. fluids

d. chloroplast

17. Look at the figure. Besides energy, what else is released during cellular respiration?

a. carbon dioxide and oxygen

b. carbon dioxide and glucose

c. carbon dioxide and food

d. carbon dioxide and water