

# KEY

1. Both a deer and a tree react to changes in their external surroundings, helping them to maintain a constant internal environment. This statement describes

- A) predation      **B) homeostasis**  
 C) antibiotic resistance    D) autotrophic nutrition

2. Which organism is classified as a heterotroph?

- A) mushroom**      B) maple tree  
 C) geranium      D) moss

3. A bean plant is an autotroph because it

- A) uses enzymes  
 B) uses oxygen  
**C) can make its own food**  
 D) absorbs nutrients from the soil

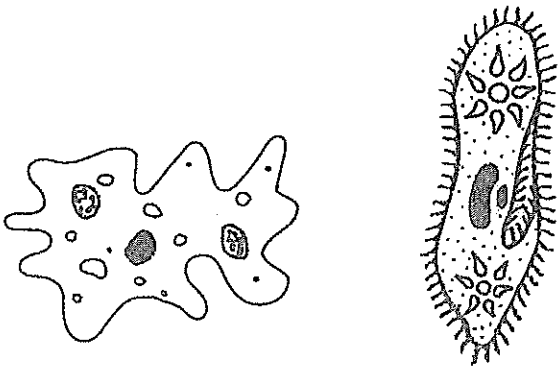
4. Which term refers to all the chemical activities that occur in an organism?

- A) synthesis      B) homeostasis  
 C) transport      **D) metabolism**

5. Which activity is *not* an example of heterotrophic nutrition?

- A) An eagle kills and eats a snake.  
 B) A tapeworm absorbs food in a human intestine.  
 C) A mushroom decomposes a dead log.  
**D) A tree makes food during photosynthesis.**

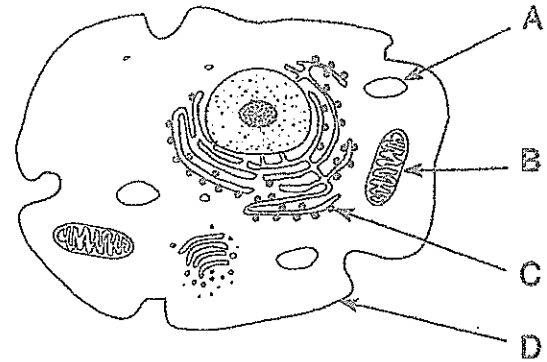
6. The diagram below represents two single-celled organisms.



These organisms carry out the activities needed to maintain homeostasis by using specialized internal

- A) tissues      **B) organelles**  
 C) systems      D) organs

7. Which letter in the diagram below indicates the cell membrane?



- A) A    B) B    C) C    **D) D**

8. Which organelle is found only in plant cells?

- A) cell membrane      B) cytoplasm  
 C) nucleus      **D) cell wall**

9. A structure involved in regulating the movement of materials into a cell is the

- A) ribosome      B) nucleus  
 C) chloroplast      **D) cell membrane**

10. Which organelles must be in a cell of a leaf for photosynthesis to occur?

- A) cell wall      **B) chloroplast**  
 C) vacuole      D) ribosome

11. Which organelle contributes the energy for muscles in an earthworm?

- A) vacuoles      B) chloroplasts  
**C) mitochondria**      D) ribosomes

12. The ribosome is an organelle that functions in

- A) making sugar      B) cellular control  
**C) making protein**      D) cellular respiration

13. Which part of a cell contains genetic material?

- A) nucleus**  
 B) cell membrane  
 C) vacuole  
 D) endoplasmic reticulum

14. Which of the following is a true statement about all living things?

- A) They cannot sense changes in their external environment.
- B) They have one or more cells.**
- C) They do not need to use energy.
- D) They reproduce asexually.

15. A bird fluffs its feathers to trap body heat to keep warm during winter months. This is an example of

- A) growth and development
- B) homeostasis**
- C) spontaneous generation
- D) asexual reproduction

16. A change in an organism's environment that effects the organism's activities is a

- A) response.
- B) metabolism.
- C) stimulus.**
- D) producer.

17. Over time, an acorn becomes an oak seedling and then an oak tree. This is an example of

- A) reproduction.
- B) metabolism.
- C) homeostasis.
- D) development**

18. When particles are moved through a membrane from a region of low concentration to a region of high concentration, the process is called

- A) diffusion.
- B) passive transport.
- C) active transport**
- D) fermentation

19. Food particles move through proteins in the cell membrane without using energy in a process called

- A) osmosis.
- B) passive transport.**
- C) active transport.
- D) endocytosis.

20. Osmosis is the diffusion of what substance through a cell membrane?

- A) water**
- B) oxygen
- C) food particles
- D) all of the above

21. If there is more water inside of a cell than outside, the cell will

- A) divide
- B) excrete salt
- C) increase its size
- D) lose water**

22. Cells are

- A) the structures that contain all of the materials necessary for life.
- B) found in all organisms.
- C) sometimes specialized for particular functions.
- D) All of the above**

23. What is the correct order of the organization in your body? OCTOOSO

- A) tissues, cells, organs, organ systems, organism
- B) cells, tissues, organs, organ systems, organism**
- C) organism, cells, tissues, organs, organ systems
- D) organs, organ systems, organism, cells, tissues

24. What are the four basic necessities of life?

- A) air, water, food, and living space
- B) sunlight, air, water, and food
- C) water, air, food, and clothing
- D) sunlight, water, food, and clothing

25. Which of the following are characteristics that all organisms share?

- A) All living things have DNA.
- B) All living things grow and develop.
- C) All living things have cells.
- D) All of the above**

26. ~~a. What is one stimulus in your environment?~~  
~~b. How do you respond to this stimulus?~~

27. ~~What six characteristics do all living things have in common?~~

28. Complete the "after" picture in the diagram

