

Skills Worksheet

Directed Reading B

Section: The Organization of Living Things (pp. 128–133)

organism

1. Anything that can carry out life processes independently is a(n)
 - a. cell.
 - b. organ system.
 - c. tissue.
 - d. organism.

2. What are the two types of organisms?

unicellular organism - has only one cell.
multicellular organism - is made up of many cells.

UNICELLULAR ORGANISMS

unicellular

3. Organisms made of one cell are
 - a. unicellular.
 - b. multicellular.
 - c. polycellular.
 - d. megacellular.

4. What are two advantages to being unicellular over having many cells?

unicellular organisms need fewer resources and can live in harsher conditions than organisms that have many cells.

MULTICELLULAR ORGANISMS

multicellular

5. Organisms made of many cells are
 - a. unicellular.
 - b. multicellular.
 - c. polycellular.
 - d. megacellular.

6. As a single cell develops into many cells, the cells become

differentiated

_____, or fixed, into different types of cells.

7. What are two reasons the characteristic larger size of a multicellular organism is an advantage?

longer life and specialization
The oldest life form with many cells is the Giant Redwood trees (2,000 years old) they are also the largest living organisms.

Directed Reading B *continued*

8. Why does a multicellular organism usually have a longer life than a unicellular organism?

A unicellular organism may dry up and die due to dehydration.
A multicellular organism can store water in some specialized cells, and allow the other cells to use the water.

9. How does having specialized cells make an organism more efficient?

Specialized cells have specific tasks and together they work as a team.
For example intestine cells can digest and bring food into the blood.
The blood cells can deliver oxygen to other cells.

FROM CELLS TO ORGANISMS

function

10. The special activity of an organ or part is its

- a. structure.
- b. differentiation.
- c. arrangement.
- d. function.

structure

11. The arrangement of parts in an organism, including the shape and material of which the part is made, is its

- a. structure.
- b. differentiation.
- c. arrangement.
- d. function.

12. Describe the structure and function of guard cells in some plants.

The guard cells can close the stoma hole so that water cannot escape from the leaves.
This prevents the leaves from drying up.

13. A group of similar cells that perform a common function is called

a(n) **tissue**.

14. What are the four basic types of animal tissues?

- 1. connective tissue (bone)
- 2. muscle
- 3. nerves
- 4. protective tissue (skin)