

Name _____

Hour _____

Cell Review

Use the vocabulary terms in the following list, fill in the blanks in the statements below.

cell membrane

cellulose

cell wall

chlorophyll

chloroplasts

chromosomes

cytoplasm

endoplasmic reticulum

Golgi body

lysosomes

mitochondria

nucleolus

nucleus

ribosomes

vacuole

1. Most steps in the process of cell respiration take place within cytoplasmic organelles called _____.
2. Sacs of digestive enzymes found mainly in the cytoplasm of animals are called _____.
3. The relatively rigid structure that supports and gives shape to the plant cell is the _____, which is made of _____.
4. In plant cells, the green pigment _____ is found within _____.
5. The cytoplasmic organelles involved in protein synthesis are the _____.
6. The site of RNA synthesis within the nucleus is the _____.
7. The material that fills the area between the nucleus and the cell membrane is the _____.
8. The membrane-bounded system of channels through which materials are transported within the cell is the _____.
9. The organelle consisting of a series of membrane-enclosed sacs usually found near the nucleus is the _____.

10. The inside of a green plant cell may be almost completely filled with a large _____.
11. The control center of the cell is the _____.
12. The passage of materials into and out of the cell is controlled by the _____.
13. Hereditary information is contained in the _____ in the nucleus.

In the answer space for each question, write the letter of the choice that best completes the statement.

- ____ 14. Which organelle is associated with a process of synthesis?
a. ribosome
b. mitochondria
c. cell membrane
d. vacuole
- ____ 15. The organelle that controls the passage of material into and out of the cell is the
a. chloroplast
b. nucleus
c. cytoplasm
d. cell membrane
- ____ 16. The cell wall is composed of
a. glycogen
b. proteins
c. cellulose
d. fatty acids
- ____ 17. Lysosomes contain
a. glycogen
b. digestive enzymes
c. hormones
d. fats
- ____ 18. All of the following are found in both plant and animal cells except
a. a cell membrane
b. a cell wall
c. mitochondria
d. the endoplasmic reticulum

- ____ 19. The nucleolus is the site of
- DNA synthesis
 - RNA synthesis
 - glucose breakdown
 - glycogen synthesis

- ____ 20. The chromatin network is found in the
- cytoplasm
 - nucleus
 - endoplasmic reticulum
 - centrosomes

In the spaces to the right of each definition, write the number of the proper example.

Definition	Example No.
A. The removal of metabolic wastes	
B. The process that occurs by an increase in cell size or cell number.	
C. The production of complex substances from simpler ones.	
D. The absorption and distribution of substances within an organism.	
E. The production of new organisms that are essentially the same as their parents.	
F. The release of energy in an organism as a result of oxidation of food materials.	
G. Maintenance of a constant internal environment.	
H. Changing food materials from the environment into a usable form.	

Examples
1. The synthesis of glycogen from glucose.
2. Glucose in the intestine reaches a muscle cell.
3. The breakdown of proteins into simple amino acids.
4. The exhaling of carbon dioxide and water vapor.
5. Body temperature is maintained at 37°C regardless of outside temperature.
6. A child grows 4 centimeters in a year.
7. The deer population of an area doubles over a period of time.
8. Glucose is converted into carbon dioxide and water.