Practice Science Test

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This is a ‘practice test’. The answers to this test can be found on between pages 16 and 44 of the text book. You may use the text to find the answers and to take notes. The test will have fewer questions but will be basically the same as this practice test.

Many of the questions in this practice test are not created as questions. I realize that this is confusing but try to imagine the statements as questions. When answering matching questions just use the letters in the answer spaces. There is a grade for this practice test and you will have the opportunity to redo this if necessary.

The Cell Test will be on Wednesday.

1. What is the process by which molecules move from an area of high concentration to an area of lower concentration? 
2. What is a light microscope that has more than one lens
3. Name the small grain-like structure in the cytoplasm of a cell where proteins are made
4. A compound that does not contain carbon is called a(n) 
5. A compound that contains carbon is called 
6. Energy-rich organic compounds, such as fats, oils, and waxes, that are made of carbon, hydrogen, and oxygen are a type of food called 
7. A cell structure that forms a maze of passageways in which proteins and other materials are carried from one part of the cell to another is called 
8. The smallest unit of most compounds is called a(n)
9. An instrument that makes small objects look larger is called a 
10. Energy-rich organic compounds, such as sugars and starches, that are made of the elements carbon, hydrogen, and oxygen are called 

**10 Matching Questions**

1. magnification
2. cell
3. chromatin
4. DNA
5. nucleic acid
6. amino acid
7. protein
8. passive transport
9. chloroplast
10. atom
11. a the ability to make things look larger than they are
12. b materials in cells that contain DNA and carries genetic information
13. c the basic unit of structure and function in living things
14. d the smallest unit of an element
15. e the movement of materials through a cell membrane without using energy
16. f small molecules that are linked together chemically to form proteins
17. g deoxyribonucleic acid; the genetic material that carries information about an organism and is passed from parent to offspring
18. h large organic molecules made of carbon, hydrogen, oxygen, nitrogen, and sometimes sulfur
19. i a very large organic molecule made of carbon, oxygen, hyrdogen, nitrogen, and phosphorus, that contains instructions that cells need to carry out all the functions of life
20. j a structure in the cells of plants and some other organisms that captures energy from sunlight and uses it to produce food

**10 Multiple Choice Questions**

1. two or more elements that are chemically combined
	1. osmosis
	2. lipid
	3. compound
	4. chromatin
2. a small round cell structure that contains chemicals that break down large food particles into smaller ones
	1. vacuole
	2. lysosome
	3. ribosome
	4. atom
3. ribonucleic acid; a nucleic acid that plays an important role in the production of proteins
	1. cell
	2. RNA
	3. DNA
	4. atom
4. the diffusion of water molecules through a selectively permeable membrane
	1. osmosis
	2. compound
	3. atom
	4. lysosome
5. a property of cell membranes that allows some substances to pass through, while others cannot
	1. cell membrane
	2. cell wall
	3. active transport
	4. selectively permeable
6. a tiny cell structure that carries out a specific function within a cell
	1. organelle
	2. cell
	3. vacuole
	4. protein
7. the ability to clearly distinguish the individual parts of an object
	1. protein
	2. diffusion
	3. chromatin
	4. resolution
8. a structure in a cell that receives proteins and other newly formed materials from the endoplasmic reticulum, packages them, and distributes them to other parts of the cell
	1. Golgi body
	2. cell theory
	3. cell wall
	4. lipid
9. a curved lens in which the center is thicker than the edges
	1. cell
	2. nucleus
	3. molecule
	4. convex lens
10. a widely accepted explanation of the relationship between cells of plants and some other organisms
	1. cell wall
	2. cell membrane
	3. cell
	4. cell theory

**9 True/False Questions**

1. nucleus → the basic unit of structure and function in living things

True        False

1. vacuole → the smallest unit of most compounds

True        False

1. mitochondrion → rod-shaped cell structures that produce most of the energy needed to carry out the cell's functions

True        False

1. cell membrane → a rigid layer of nonliving material that surrounds the cells of plants and some other organisms

True        False

1. active transport → the movement of materials through a cell membrane without using energy

True        False

1. cell wall → a rigid layer of nonliving material that surrounds the cells of plants and some other organisms

True        False

1. element → any substance that cannot be broken down into simpler substances

True        False

1. enzyme → a type of protein that speeds up a chemical reaction in a living thing

True        False

1. cytoplasm → the region between the cell membrance and the nucleus; in organisms without a nucleus, the region located inside the cell membrane

True        False