Students: Practice with all these questions!

Also, practice with the Kahoot game questions we did in class:
https://play.kahoot.it/#/k/6ea14f03-9a5c-4bd6-b001-92864cbb1bd7
https://play.kahoot.it/#/k/b0f459e2-eea1-47ff-9bb4-011ed032e5f4

Practice, practice, practice … And you'll do great!

-Mr. Watkins

Halfway Test

Practice Questions

Biology | FHS

Mr. Watkins

1. The sharing of electrons results in _____ bonding.

a. Covalent
b. Ionic
c. Hydrogen
d. Atomic

2. One water molecule bonds with another using _____ bonds.

a. Covalent
b. Ionic
c. Hydrogen
d. Atomic

3. Water's attraction to other molecules is called…

4. What property of water is responsible for the leaf's ability to float atop the water?

a. Water is a solvent
b. Heat storage
c. Ice formation
d. Surface tension

5. Aside from pH, which factor greatly impacts an enzyme's ability to function due to the enzyme being denatured?

a. Temperature
b. the number of enzymes present in a solution.
c. the size of the enzyme.
d. the presence of an inhibitor.

6. Enzymes _____ the rate of a chemical reaction.

7. Which of the following are the building block for proteins?

a. Monosaccharides
b. Amino acids
c. Nucleic acids
d. Phosphates

8. Which of the following are the building block for carbohydrates?

a. Monosaccharides
b. Amino acids
c. Nucleic acids
d. Phosphates

Match the function with the appropriate macromolecule

9. Proteins
10. Carbohydrates
11. Nucleic acids
12. Lipids

a. body's quickest source of <u>energy</u>
b. forms important membranes throughout the cell
c. regulates cell processes
d. links nitrogenous bases
e. stores genetic information

13. What are the 3 parts of the cell theory?

14. Which of the following is found in plant but not animal cells?

a. Mitochondrion
b. Smooth ER
c. Golgi Apparatus
d. Cell wall

15. Which organelle acts like a post office for the cell, packaging and processing proteins to be transported throughout the cell?

16. Where is the DNA located in the cell?

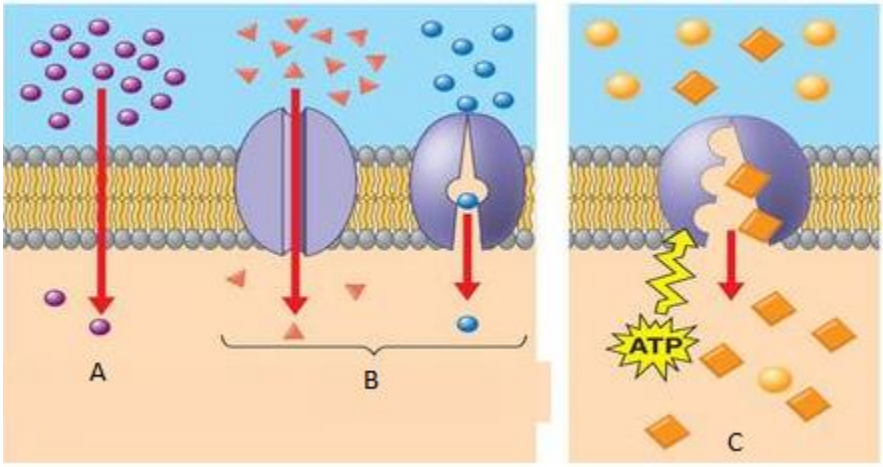
17. What is the function of the chloroplast?

18. Which of the following is responsible for making proteins?

19. Osmosis is the movement of _____.

20. In osmosis, movement goes from a _____ solution to a_____ solution.

a. Isotonic, hypertonic
b. Hypertonic, hypotonic
c. Hypotonic, hypertonic
d. Hypertonic, hypotonic



21. What kind of movement across the cell membrane is depicted in letter A?

22. What kind of movement across the cell membrane is depicted in letter B?

23. What kind of movement across the cell membrane is depicted in letter C?

24. What is the end goal of DNA replication?

a. similar strands of DNA
b. Separate the DNA double helix
c. New DNA sequences
d. identical strands of DNA

25. If a DNA is 30% adenine, what percentage of thymine would you expect to find?

a. 20%
b. 15%
c. 30%
d. 40%

26. Which of the following make up a nucleotide?

a. Phosphate, sugar, amino acid
b. Nitrogenous base, phosphate, sugar
c. Nucleic acid, hydrogen bonds, sugar
d. Carbohydrates, phosphate, sugar

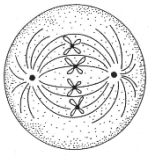
27. During which of the following phases does DNA replication take place?

a. G1
b. G2
c. S
d. M

28. During which phase does cell division occur?

a. G1
b. G2
c. S
d. M

29. Which phase is pictured to the right?



30. During which phase do chromosomes line up in the middle of the cell?

31. The two stages of cell division are_____ and _____.

a. Mitosis and S phase
b. Cytokinesis and telophase
c. Mitosis and cytokinesis
d. Anaphase and metaphase

32. The end goal of cell division is two daughter cells with _____ genetic information.

a. Similar
b. Different
c. Complementary
d. Identical

33. A prokaryote's DNA is located in the _____ while a eukaryotes DNA is located in the _____.

a. Ribosomes, nucleolus
b. Cytoplasm, nucleus
c. Nucleolus, nucleus
d. Nucleus, cytoplasm

34. In passive diffusion, substances always move

a. from an area with more of the molecules to an area with fewer of the molecules
b. from an area of higher concentration to an area of lower concentration
c. from an area of lower concentration to an area of higher concentration
d. from an area with fewer of the molecules to an area with more of the molecules

35. What are prokaryotes also known as?