Cell Quiz III Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ January 26, 2017

1. Which of the following encloses their DNA in a nucleus?

|  |  |
| --- | --- |
| A. | prokaryotes |
| B. | bacteria |
| C. | eukaryotes |
| D. | viruses |

1. Which of the following organisms are prokaryotes?
2. Plants
3. Animals
4. Fungi
5. Bacteria
6. Which of the following is a function of the nucleus?
7. Stores DNA
8. Stores sugar
9. Builds proteins
10. Packages proteins
11. Which of the following best describes the relationship between the nucleus and the cytoplasm?
12. The cytoplasm is a fluid that fills the inside of the nucleus
13. The cytoplasm is an organelle that is usually found near the nucleus.
14. The nucleus is an organelle that is surrounded by the cytoplasm.
15. The nucleus is a fluid and it mixes with the fluid cytoplasm.
16. Which of the following is a function of the cytoskeleton?
17. Helps a cell keep its shape
18. Contains DNA
19. Surrounds the cell
20. Helps make proteins
21. Which organelle converts the chemical energy stored in food into compounds that are more convenient for the cell to use?
22. Chloroplast
23. Golgi complex
24. Endoplasmic reticulum
25. Mitochondria
26. Which of the following is a function of the cell membrane?
27. Breaks down lipids, carbohydrates, and proteins from foods
28. Stores water, salt, proteins, and carbohydrates
29. Keeps the cell wall in place
30. Regulates the movement of materials into and out of the cell
31. The cell membrane contains channels and pumps that help move materials from one side to the other. What are these channels and pumps made of?
32. Carbs
33. Lipids
34. Bi-lipids
35. Proteins
36. Nucleic Acids
37. Which organelle contains enzymes that are necessary for intracellular digestion? (1pt)
38. Flagella
39. Lysosome
40. Mitochondria
41. Ribosome
42. While lifting weights, muscle cells consume large amounts of energy. Which organelles increase their activity in muscle cells during weight training to make more energy available? (1pt)
43. Nucleus
44. Ribosome
45. Mitochondria
46. Golgi bodies

Use the diagram below to answer questions 11-14



1. Organelle 11 would best be described as…
2. Nucleus B. Mitochondria C. Rough ER D. Golgi Complex
3. Organelle 3 would best be described as…
4. Nucleus B. Plasma membrane C. Cell wall D. Cell Membrane
5. Organelle 6 would best be described as…
6. Mitochondria B. Vacuole C. Cytoskeleton D. Plasmodesmata
7. This cell is a…
8. Plant cell B. Animal cell C. Prokaryote D. Virus

 Identify the following molecules as either **(not all answers will be used**):

1. Carbohydrate B. Protein C. Lipid D. Nucleic Acid
2.  17. 
3. 18. 

19. At high temperatures, the rate of enzyme action decreases because the increased heat

 A. Changes the pH of the system

 B. Alters the active site of the enzyme

 C. neutralizes the acids and bases

 D. Increases the concentration of the enzyme

20. A certain enzyme will hydrolyze (break down) egg white but not starch. Which statement best explains this observation?

 A. Starch molecules are too large to be hydrolyzed

 B. Enzyme molecules are specific in their actions.

 C. Egg white acts as a coenzyme for hydrolysis.

 D. Starch is composed of amino acids.