Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_\_\_\_\_\_\_

Unit 4 Test Review – Test Sections 1 & 2

Cell Energy, Organelles and Functions

1. Which cell organelle determines the amount of ATP (Cell Energy!) that is available to the cell?
2. What is the process called that creates ATP and changes O2 and Glucose into CO2 and H2O?
3. What organelles are used in creating proteins (protein synthesis)? Write them in order of the process.
4. If we were to increase the amount of Rough E.R. in a cell, what other organelle would we also need more of (HINT: Think protein synthesis!)?
5. Enzymes are what type of macromolecule? REMEMBER THIS.

Next to each description, write which organelle is described:

1. Contains Genes and controls the cells function
2. Enzyme made of Nucleic Acid helps assemble Amino Acids based on information from DNA (Use deductive reasoning for this one… which one would assemble amino acids?)
3. Processes Lipids to make more Membrane for the cell
4. What organelle is the major producer of ATP and sugar and makes a cell autotrophic?
5. Which organelle helps maintain pressure in a plant cell and stores nutrients?
6. What is the rigid layer that provides structure to plant cells called?
7. Which organelle converts light energy into sugars?
8. Which organelle sorts and processes proteins?
9. Which organelle is the location where transcription & DNA replication occur?
10. Storage compartment for water and nutrients
11. Which organelle holds genetic information (DNA)
12. Which organelle assembles amino acid chains? (protein chains)
13. Which organelle processes and folds amino acid chains into finished proteins?
14. Which organelle sorts and ships completed proteins where they need to go in the body?
15. If you eat a lot of glucose, which organelle would your cells make more of to help process the glucose?
16. What would happen if you ate a lot of glucose and removed the mitochondria from your cells?
17. Which organelles are found in plant cells but NOT in animal cells?
18. Which types of organisms perform photosynthesis?
19. Which types of organisms perform cellular respiration?
20. Can ATP ONLY be made in the mitochondria? Where else could it be made?
21. What are the differences between a prokaryotic and eukaryotic cells?
22. If we increased the amount of light intensity available to a plant, what else would increase?
23. What is the formula for photosynthesis (Write it using simple words AND using the chemical equation)?
24. What is the formula for chemical respiration (Write it using simple words AND using the chemical equation)?
25. Label this animal cell using black pen or pencil. Using a red colored pencil (or other color), draw arrows showing the process of protein synthesis. Using a blue colored pencil, draw arrows showing the process of cellular respiration.

