Quarterly 3 Review Sheet

1. Write the equation for Cellular Respiration, and Photosynthesis, below. Label the reactants vs. the products, and state the organelle where each occurs.

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1. Cellular Respiration releases energy by breaking the bonds in food molecules.

\_\_\_\_\_\_\_\_\_\_\_\_\_ is the energy storing molecule and when a bond breaks, it becomes\_\_\_\_\_\_\_.

1. Energy, to be used by cells of an organism, is stored in the form of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_energy.
2. **Enzymes** are macromolecules called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. They are ‘reusable’ but are damaged by high \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and changes in \_\_\_\_\_. The word **“denatured”** means that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Contrast the products, plus the amount of ATP produced, for aerobic and anaerobic(s) respiration. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

“Aerobic” means\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Anaerobic Respiration, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, results in bread rising and being fluffy;

Anaerobic Respiration , or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, results in alcohol production.

1. The 4 main elements that make up living things are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. These elements also make up this macromolecule \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Which macromolecule is the building block of ‘tissues’ of our bodies (skin, organs…) and regulates reactions in the body?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. This macromolecule provides ‘quick energy’ to living organisms.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What determines the type of protein that is made in the ribosomes?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. DNA and RNA are in the macromolecule category called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The monomer, or subunit, of carbohydrates.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. The monomer, or subunit, of proteins.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Proteins are digested into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, so they can be transported to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The process used by yeast that results in fluffy bread is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. How many ATP’s are produced by this type of ‘anaerobic respiration?’
10. Define ‘biodiversity.’\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Contrast biotic vs. abiotic.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Give an example of ‘ecological succession.’\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What does the term ‘tropic level’ mean?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Name the molecule that controls the making of proteins.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is a ‘symbiotic relationship?’ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Acid rain has been on the increase. It causes tomb stones to erode and rusting of cars. Years ago, this wasn’t such a problem. What is causing the increased amount of acid rain?\_\_\_\_\_\_\_

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**Draw, and label, an energy pyramid.**

**Draw, and label, a food chain containing 4 organisms**.