REVIEW Name:

1. List the major chemical elements in the cells

C

H

N

O

P

S

2. Identify the function of the four major macromolecules

C

P

L

N

3. Explain how the properties of water

Cohesion:

Adhesion:

Heat capacity:

Solvent properties:

4. Explain the role of enzymes in cell chemistry.

5. Distinguish between autotrophic and heterotrophic cells.

6. Write the equation for photosynthesis and cellular respiration.

Photosynthesis:

Cellular Respiration:

7. Describe the 3 parts of the cell theory.

1.

2.

3.

8. Describe osmosis, diffusion and active transport.

Osmosis:

Diffusion:

Active transport:

9. Describe the function of these various organs.

Heart:

Lungs:

Skin:

Leaf:

Stem:

Root:

10. Describe the structure and function of these various organ systems.

Digestion:

Respiration:

Circulatory:

Nervous:

11. Compare the advantages/disadvantages of sexual and asexual reproduction to survival of species.

12. Explain the significance of meiosis and fertilization in genetic variation.

13. Explain what these Genetic terms mean.

Dominance:

Recessive:

Incomplete dominance:

Codominance:

Sex-linked traits:

14. Explain the importance of DNA replication in cell reproduction.

15. Describe the effects of environmental factors on natural selection.

16. Relate genetic variability to a species’ potential for adaptation to a changing environment.

17. Relate reproductive isolation to speciation.

18. Compare selective breeding to natural selection.

19. Identify the role of mutation and recombination in evolution.

20. Explain how evolutionary relationships are related to classification systems.