Objectives

Decide whether each of the following objectives is written in terms of observable student behavior. Remember that in order for an objective to be behavioral, it must name the act a student would be performing when demonstrating that he has achieved the objective. Simply write “yes” or “no.”

The Students Will Be Able To:

\_\_\_\_\_\_\_ 1. Be familiar with set notation.

\_\_\_\_\_\_\_ 2. Write a definition of “perpendicular lines.”

\_\_\_\_\_\_\_ 3. Understand the meaning of the Pythagorean Theorem.

\_\_\_\_\_\_\_ 4. Grasp the significance of the concept of “field” in mathematics.

\_\_\_\_\_\_\_ 5. Appreciate the elegance of proof.

\_\_\_\_\_\_\_ 6. Identify the prime factors of natural numbers.

\_\_\_\_\_\_\_ 7. Really understand word problems.

\_\_\_\_\_\_\_ 8. Graph a linear equation of the form, y = ax + b, where a and b are real.

\_\_\_\_\_\_\_ 9. Prove deductively that (-x)y = -(xy)

\_\_\_\_\_\_\_ 10. Describe the changes in the zeros of the function as c takes on integral values from 0 to 5 when given a function defined by y = x2 + 4x + c

\_\_\_\_\_\_\_ 11. Illustrate the water cycle.

\_\_\_\_\_\_\_ 12. Name the different biomes.

\_\_\_\_\_\_\_ 13. Understand how mol conversions are performed.

\_\_\_\_\_\_\_ 14. Design a food chain.

\_\_\_\_\_\_\_ 15. Have an open mind about evolution.

\_\_\_\_\_\_\_ 16. Know how to make a testable hypothesis.

\_\_\_\_\_\_\_ 17. Evaluate how volcanic dust affects the quality of the environment.

\_\_\_\_\_\_\_ 18. Describe biotic and abiotic factors that affect human populations.

\_\_\_\_\_\_\_ 19. Know the importance of water to cells.

\_\_\_\_\_\_\_ 20. Analyze the relationship between nucleic acid, genes, and chromosomes, and then explain how genetic variation occurs.