Chemistry

- 1. Do EACH of the following activities:
 - a. Describe three examples of safety equipment used in a chemistry laboratory and the reason each one is used.
 - b. Describe what a safety data sheet (SDS) is and tell why it is used.
 - c. Obtain an SDS for both a paint and an insecticide. Compare and discuss the toxicity, disposal, and safe-handling sections for these two common household products.
 - d. Discuss the safe storage of chemicals
- 2c. Describe the difference between a chemical reaction and a physical change.
- 4b. Describe the chemical similarities and differences between toothpaste and an abrasive household cleanser. Explain how the end use or purpose of a product affects its chemical formulation.
- 5. List the five classical divisions of chemistry. Briefly describe each one, and tell how it applies to your everyday life.
- 6a. Name two government agencies that are responsible for tracking the use of chemicals for commercial or industrial use.
- 6b. Define pollution. Explain the chemical impacts on the ozone layer and global climate change.
- 6c. Using reasons from chemistry, describe the effect on the environment of ONE of the following: The production of aluminum cans, Burning fossil fuels, Single-use items, such as water bottles, bags, straws, or paper.
- 6d. Briefly describe the purpose of phosphates in fertilizer and in laundry detergent. Explain how the use of phosphates in fertilizers affects the environment. Explain why phosphates have been removed from laundry detergents.