

REVIEW

6

SECTION 6.4

Acids and Bases in the Home

1. **Classify** the following household products as either acids or bases:

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|----------------------|------------------------|
| _____ a. soaps | _____ e. clothing dyes |
| _____ b. bleach | _____ f. antacid |
| _____ c. vitamin C | _____ g. vinegar |
| _____ d. baking soda | _____ h. lye |

2. **Describe** the role of soap as an emulsifier when washing oil or grease from your hands.

3. **Explain** why a substance containing only long hydrocarbon chains would not be a good emulsifier for mixtures of water and oil.

4. Hydrogen peroxide, H_2O_2 , is a common bleaching agent and disinfectant readily available at the local drugstore as a 3 percent solution.

a. **Describe** what a disinfectant does.

b. **Calculate** how many grams of hydrogen peroxide must be added to 194 g of water to make a 3.0 percent solution.

c. **Describe** what a bleaching agent does.

5. **Explain** methanol's ability to act like an emulsifier in removing water from fuel. (**Hint:** Methanol has both a polar and a nonpolar end.)
