Name	Class	Date	
CHAPTER 4		SKILL ACTIVITY—	
The Chemical Basis of Life		Applying Concepts	

## Identifying Chemical Compounds

A. Study the rules and formulas below. Then, on the first line under each formula, tell whether the substance is organic or inorganic. On the second line, indicate whether the substance is a carbohydrate, fat or oil, protein or amino acid, or none of these.

Rules

- 1. All organic compounds contain carbon. Most inorganic compounds do not contain carbon. Carbon dioxide is an exception.
- 2. In carbohydrate molecules, the ratio of hydrogen to oxygen is 2:1.
- 3. In fats and oils, the ratio of hydrogen to oxygen is much greater than 2:1.
- 4. Amino acids contain an amino group (—NH<sub>2</sub> or N—H—) and an organic acid group (—COOH or —C—OH)

**Formulas** 

 $C_{18}H_{34}O_3$ 

CH3COOH

9.

10.

11.

12.

13.

$$C_3H_5(C_{17}H_{35}O_2)_3$$

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