



Semester 2 – Chemistry Worksheet  
Lesson 10.3

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

1. A compound is 21.20% Nitrogen, 6.06% Hydrogen, 24.30% Sulfur, and 48.45% Oxygen. Write the empirical formula and name the compound.
  - a.  $\text{NH}_4\text{SO}_4$
  - b.  $\text{N}_2\text{H}_4\text{SO}_4$
  - c.  $(\text{NH}_4)_3\text{SO}_3$
  - d.  $(\text{NH}_4)_2\text{SO}_4$
  
2. A compound is 38.6 % Na, 26.9% S, and 53.8% O. Its molecular mass is 142 g/mole. What is its molecular formula?
  - a.  $\text{NaSO}_4$
  - b.  $\text{Na}_2\text{SO}_4$
  - c.  $\text{Na}_2\text{SO}_3$
  - d.  $\text{NaSO}_3$