## **Chapter 10 Quiz**

Name	Date	Period

- 1. What is a mole?
- 2. How many moles is 2.80 X 10<sup>24</sup> atoms of silicon?

- 3. How many molecules is 0.360 moles of water?
- 4. How many atoms are there in 1.14 moles of SO<sub>3</sub>?
- 5. What is the formula mass of each of the following (show your work!)? a. C<sub>3</sub>H<sub>7</sub>OH
  - b. (NH4)2CO3
  - c. aluminum sulfite
- 6. How many grams are in 9.45 moles of dinitrogen trioxide?

- 7. How many moles are in 92.2 grams of iron (III) oxide?
- 8. How many moles are in 847 grams (NH<sub>4</sub>)OH?
- 9. How many liters of gas at STP is in 0.60 moles of SO<sub>2</sub>?
- 10. How many moles are in 0.880 L of He gas at STP?
- 11. What is STP? Give the definition, measurements, and units.
- 12. What is the molar mass of a compound containing oxygen and carbon if it has a density of 1.964 g/L at STP?
- **13.** An **8.20** gram piece of magnesium combines with **5.40** grams of oxygen to form a compound. What is the percent composition of the compound?
- 14. What is the percent composition of propane (C<sub>3</sub>H<sub>8</sub>)?