Name:	Date:	
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Counting Atoms and Molecules

Analyze each chemical formula and indicate how many particles of each type are represented.

 $1.C_{3}H_{8}$

How many molecules of C₃H₈?

How many atoms of C? _____

How many atoms of H? _____

2. 2 KClO₃

How many molecules of KClO₃?

How many atoms of K?

How many atoms of Cl? _____

How many atoms of O? _____

3.3 $(NH_4)_2SO_4$

How many molecules of $(NH_4)_2SO_4$?

How many atoms of N? _____

How many atoms of H? _____

How many atoms of S? _____

How many atoms of O?

4.6 C₈H₁₇OH

How many molecules of C₈H₁₇OH?

How many atoms of C?

How many atoms of H? _____

How many atoms of O? _____

9.2 – Balancing Chemical Equations.... More practice

1. When sodium is combined with water it explodes producing sodium hydroxide and hydrogen gas.

2. When ammonia burns in oxygen it produces water vapor and nitrogen dioxide gas.

3.
$$Cu_2S$$
 + O_2 \longrightarrow Cu_2O + SO_2

4.
$$C_3H_8$$
 + O_2 \longrightarrow CO_2 + H_2O

5.
$$CaCO_3$$
 + $HCI \longrightarrow CaCl_2$ + H_2O + CO_2

6. Al +
$$Fe_2O_3$$
 \longrightarrow Al_2O_3 + Fe

7.
$$KCIO_3 \longrightarrow KCI + O_2$$