

Counting Atoms Sheet

Name each of the following chemical compounds (make sure you use the right naming scheme!) and determine how many atoms of each element are present:

- 1) CaF_2 _____
- 2) $\text{Be}(\text{OH})_2$ _____
- 3) NO_2 _____
- 4) $\text{Al}_2(\text{SO}_4)_3$ _____
- 5) NH_4NO_3 _____
- 6) S_2F_2 _____
- 7) Na_2CO_3 _____
- 8) CH_4 _____

Write the formulas for each of the following chemical compounds (make sure you use the right naming scheme!) and determine how many atoms of each element are present:

- 9) phosphorus trichloride _____
- 10) magnesium hydroxide _____
- 11) potassium phosphate _____
- 12) diphosphorus tetrabromide _____
- 13) ammonia _____
- 14) germanium phosphate _____
- 15) ammonium sulfate _____
- 16) diphosphorus pentoxide _____

Counting Atoms Sheet - Answers

Name each of the following chemical compounds (make sure you use the right naming scheme!) and determine how many atoms of each element are present:

- 1) CaF_2 **calcium fluoride, 1 calcium, 2 fluorine**
- 2) $\text{Be}(\text{OH})_2$ **beryllium hydroxide, 1 Be, 2 O, 2 H**
- 3) NO_2 **nitrogen dioxide, 1 nitrogen, 2 oxygen**
- 4) $\text{Al}_2(\text{SO}_4)_3$ **aluminum sulfate, 2 Al, 3 S, 12 O**
- 5) NH_4NO_3 **ammonium nitrate, 2 N, 4 H, 3 O**
- 6) S_2F_2 **disulfur difluoride, 2 sulfur, 2 fluorine**
- 7) Na_2CO_3 **sodium carbonate, 2 Na, 1 C, 3 O**
- 8) CH_4 **methane, 1 carbon, 4 hydrogen**

Write the formulas for each of the following chemical compounds (make sure you use the right naming scheme!) and determine how many atoms of each element are present:

- 9) phosphorus trichloride **PCl_3 , 1 phosphorus, 3 chlorine**
- 10) magnesium hydroxide **$\text{Mg}(\text{OH})_2$, 1 Mg, 2 O, 2 H**
- 11) potassium phosphate **K_3PO_4 , 3 K, 1 P, 4 O**
- 12) diphosphorus tetrabromide **P_2Br_4 , 2 phosphorus, 4 bromine**
- 13) ammonia **NH_3 , 1 nitrogen, 3 hydrogen**
- 14) germanium phosphate **$\text{Ge}_3(\text{PO}_4)_4$, 3 Ge, 4 P, 16 O**
- 15) ammonium sulfate **$(\text{NH}_4)_2\text{SO}_4$, 2 N, 8 H, 1 S, 4 O**
- 16) diphosphorus pentoxide **P_2O_5 , 2 P, 5 O**