NAME:	

BLOCK: _____ **DATE:** _____

CHEMISTRY: COUNTING ATOMS IN COMPOUNDS WORKSHEET #7.0.1

INSTRUCTIONS: Write the quantity of atoms of each element opposite the formula of the compound for the quantity of formula units and molecules shown:

For example: $5P_2O_3$

 $P = (5 \times 2 =) 10$ $O = (5 \times 3 =) 15$

For example: $4Zn(NO_3)_2$

 $Zn = (4 \times 1 =)4$ $N = (4 \times 1 \times 2 =)8$ $O = (4 \times 3 \times 2 =)24$

1. $4K_2CO_3$

 $K = \underline{\hspace{1cm}} C = \underline{\hspace{1cm}} O = \underline{\hspace{1cm}}$

2. $2Sr_3(PO_4)_2$ $Sr = \underline{\hspace{1cm}} P = \underline{\hspace{1cm}} O = \underline{\hspace{1cm}}$

3. $3N_4O_{10}$ N = ____ O = ____

4. $2(NH_4)_3N$ N = H =

5. 8Cl₂O Cl = ____ O = ____

6.

 $Ca(C_2H_3O_2)_2$ Ca = C = H = O =

7. 12NaBr $Na = \underline{\hspace{1cm}} Br = \underline{\hspace{1cm}}$

8. $4Al(OH)_3$

 $Al = \underline{\hspace{1cm}} O = \underline{\hspace{1cm}} H = \underline{\hspace{1cm}}$

9. 3NaHCO₃

 $Na = \underline{\hspace{1cm}} H = \underline{\hspace{1cm}}$

C = ____ O = ____

10.

11. $7C_2S_2$

 $C = \underline{\hspace{1cm}} S = \underline{\hspace{1cm}}$

12. $4\text{Fe}_2\text{O}_3$

Fe = ____ O = ____

13.

 $6Ba(MnO_4)_2$ $Ba = ____ Mn = ___ O = ____$

14. $3V_2O_5$ V = ____ O = ____

15. $2KNO_3$

K = N = O =

16. $9MgSO_4$

 $Mg = \underline{\hspace{1cm}} S = \underline{\hspace{1cm}} O = \underline{\hspace{1cm}}$

17. $5Al_2(SiO_3)_2$

Al = Si = O =

18. $4Au(IO_3)_3$

Au = ____ O = ____

INSTRUCTIONS: Write the quantity of atoms of each element opposite the formula of the compound for the quantity of formula units and molecules shown:

For example: $5P_2O_3$ $P = (5 \times 2 =) 10$ $O = (5 \times 3 =) 15$

For example: $4\text{Zn}(NO_3)_2$ $\text{Zn} = (4 \times 1 =)4$ $N = (4 \times 1 \times 2 =)8$ $O = (4 \times 3 \times 2 =)24$

19. $8SnCl_4$ $Sn = ____ Cl = ____$

20. $6Cu_2SeO_4$ $Cu = ____ Se = ____ O = ____$

21. $3AsBr_3$ $As = ____ Br = ____$

22. $2H_2SO_4$ $H = ____ S = ___ O = ____$

23. SBr_2 $S = ___ Br = ____$

24. $4Ca(OH)_2$ $Ca = ____ O = ___ H = ____$

25. $5Mg_3(PO_4)_2$ $Mg = ____ P = ____ O = ____$

26. $12H_{2}O$ $H = ____ O = ____$

27. $5N_2O_4$ $N = ____ O = ____$

28. 3CIF C1 = F =

29. $7P_2O_5$ P = O = O =

30. $2KrCl_6$ Kr = Cl =

31. $5Al(C_2H_3O_2)_2$ $Al = ____ O = ____ O = ____$

32. $3(NH_4)_2Cr_2O_7$ $N = ____ H = ____ Cr = ____ O = ____$

33. $5\text{Fe}_3(\text{PO}_4)_2$ Fe = P = O =

34. $2NH_4NO_3$ $N = ____$ $H = ____$ $O = _____$

35. $5BaC_4H_4O_6$ $Ba = ____ C = ___ H = ___ O = ____$

36. $4Cu(HSO_3)_2$ $Cu = ____$ $H = ____$ $S = ____$ $O = _____$

37. $9Au(NO_2)_2$ Au = N = O =

38. $3K_2ZnO_2$ $K = ____ O = ____$

39. $3Sr(MnO_4)_2$ $Sr = ____ O = ____$

40. $4Al_2(CO_3)_3$ $Al = ____ C = ____ O = ____$