

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: $5\text{P}_2\text{O}_3$ $\text{P} = (5 \times 2 =) 10$ $\text{O} = (5 \times 3 =) 15$

For example: $4\text{Zn}(\text{NO}_3)_2$ $\text{Zn} = (4 \times 1 =) 4$ $\text{N} = (4 \times 1 \times 2 =) 8$ $\text{O} = (4 \times 3 \times 2 =) 24$

1. $4\text{K}_2\text{CO}_3$ $\text{K} =$ _____ $\text{C} =$ _____ $\text{O} =$ _____
2. $2\text{Sr}_3(\text{PO}_4)_2$ $\text{Sr} =$ _____ $\text{P} =$ _____ $\text{O} =$ _____
3. $3\text{N}_4\text{O}_{10}$ $\text{N} =$ _____ $\text{O} =$ _____
4. $2(\text{NH}_4)_3\text{N}$ $\text{N} =$ _____ $\text{H} =$ _____
5. $8\text{Cl}_2\text{O}$ $\text{Cl} =$ _____ $\text{O} =$ _____
6. $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$ $\text{Ca} =$ _____ $\text{C} =$ _____ $\text{H} =$ _____ $\text{O} =$ _____
7. 12NaBr $\text{Na} =$ _____ $\text{Br} =$ _____
8. $4\text{Al}(\text{OH})_3$ $\text{Al} =$ _____ $\text{O} =$ _____ $\text{H} =$ _____
9. 3NaHCO_3 $\text{Na} =$ _____ $\text{H} =$ _____ $\text{C} =$ _____ $\text{O} =$ _____
10. $5\text{Ga}_2(\text{Cr}_2\text{O}_7)_3$ $\text{Ga} =$ _____ $\text{Cr} =$ _____ $\text{O} =$ _____
11. $7\text{C}_2\text{S}_2$ $\text{C} =$ _____ $\text{S} =$ _____
12. $4\text{Fe}_2\text{O}_3$ $\text{Fe} =$ _____ $\text{O} =$ _____
13. $6\text{Ba}(\text{MnO}_4)_2$ $\text{Ba} =$ _____ $\text{Mn} =$ _____ $\text{O} =$ _____
14. $3\text{V}_2\text{O}_5$ $\text{V} =$ _____ $\text{O} =$ _____
15. 2KNO_3 $\text{K} =$ _____ $\text{N} =$ _____ $\text{O} =$ _____
16. 9MgSO_4 $\text{Mg} =$ _____ $\text{S} =$ _____ $\text{O} =$ _____
17. $5\text{Al}_2(\text{SiO}_3)_2$ $\text{Al} =$ _____ $\text{Si} =$ _____ $\text{O} =$ _____
18. $4\text{Au}(\text{IO}_3)_3$ $\text{Au} =$ _____ $\text{I} =$ _____ $\text{O} =$ _____

(Continued)

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19. 8SnCl_4 $\text{Sn} =$ _____ $\text{Cl} =$ _____
20. $6\text{Cu}_2\text{SeO}_4$ $\text{Cu} =$ _____ $\text{Se} =$ _____ $\text{O} =$ _____
21. 3AsBr_3 $\text{As} =$ _____ $\text{Br} =$ _____
22. $2\text{H}_2\text{SO}_4$ $\text{H} =$ _____ $\text{S} =$ _____ $\text{O} =$ _____
23. SBr_2 $\text{S} =$ _____ $\text{Br} =$ _____
24. $4\text{Ca}(\text{OH})_2$ $\text{Ca} =$ _____ $\text{O} =$ _____ $\text{H} =$ _____
25. $5\text{Mg}_3(\text{PO}_4)_2$ $\text{Mg} =$ _____ $\text{P} =$ _____ $\text{O} =$ _____
26. $12\text{H}_2\text{O}$ $\text{H} =$ _____ $\text{O} =$ _____
27. $5\text{N}_2\text{O}_4$ $\text{N} =$ _____ $\text{O} =$ _____
28. 3ClF $\text{Cl} =$ _____ $\text{F} =$ _____
29. $7\text{P}_2\text{O}_5$ $\text{P} =$ _____ $\text{O} =$ _____
30. 2KrCl_6 $\text{Kr} =$ _____ $\text{Cl} =$ _____
31. $5\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_2$ $\text{Al} =$ _____ $\text{C} =$ _____ $\text{H} =$ _____ $\text{O} =$ _____
32. $3(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ $\text{N} =$ _____ $\text{H} =$ _____ $\text{Cr} =$ _____ $\text{O} =$ _____
33. $5\text{Fe}_3(\text{PO}_4)_2$ $\text{Fe} =$ _____ $\text{P} =$ _____ $\text{O} =$ _____
34. $2\text{NH}_4\text{NO}_3$ $\text{N} =$ _____ $\text{H} =$ _____ $\text{O} =$ _____
35. $5\text{BaC}_4\text{H}_4\text{O}_6$ $\text{Ba} =$ _____ $\text{C} =$ _____ $\text{H} =$ _____ $\text{O} =$ _____
36. $4\text{Cu}(\text{HSO}_3)_2$ $\text{Cu} =$ _____ $\text{H} =$ _____ $\text{S} =$ _____ $\text{O} =$ _____
37. $9\text{Au}(\text{NO}_2)_2$ $\text{Au} =$ _____ $\text{N} =$ _____ $\text{O} =$ _____
38. $3\text{K}_2\text{ZnO}_2$ $\text{K} =$ _____ $\text{Zn} =$ _____ $\text{O} =$ _____
39. $3\text{Sr}(\text{MnO}_4)_2$ $\text{Sr} =$ _____ $\text{Mn} =$ _____ $\text{O} =$ _____
40. $4\text{Al}_2(\text{CO}_3)_3$ $\text{Al} =$ _____ $\text{C} =$ _____ $\text{O} =$ _____