

Name: $\qquad$

## Chem!stry class:

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Date: $\qquad$ / $\qquad$ / ......

## Introduction to Writing Balanced Chemical Equations

1. How many atoms of chlorine are there in $\mathrm{Cl}_{2}$ ?
2. How many atoms of hydrogen are there in $\mathrm{NH}_{3}$ ?
3. How many atoms of oxygen are there in $\mathrm{CH}_{3} \mathrm{COOH}$ ?
4. How many atoms of hydrogen are there in $\left(\mathrm{NH}_{4}\right)_{2} \mathrm{SO}_{4}$ ?
5. How many atoms of nitrogen are there in $\mathrm{Fe}\left(\mathrm{NO}_{3}\right)_{3}$ ?
6. How many atoms of oxygen are there in $\mathrm{Ca}_{3}\left(\mathrm{PO}_{4}\right)_{2}$ ?
7. How many atoms of hydrogen are there in $\left(\mathrm{NH}_{4}\right)_{3} \mathrm{PO}_{4}$ ?
8. How many atoms of oxygen are there in $\mathrm{Mg}_{3} \mathrm{Si}_{4} \mathrm{O}_{10}(\mathrm{OH})_{2}$ ?
9. How many atoms of oxygen are there in $\mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}$ ?
10. How many atoms of oxygen are there in $\mathrm{CuSO}_{4} \cdot 5 \mathrm{H}_{2} \mathrm{O}$
11. How many atoms of sulfur are there in $4 \mathrm{~S}_{8}$ ?
12. How many atoms of chlorine are there in $3 \mathrm{PCl}_{5}$ ?
13. How many atoms of hydrogen are there in $6 \mathrm{H}_{2} \mathrm{O}_{2}$ ?
14. How many atoms of sulfur are there in $7 \mathrm{Na}_{2} \mathrm{~S}_{2} \mathrm{O}_{3}$ ?
15. How many atoms of hydrogen are there in $3 \mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}_{3}$ ?
16. How many atoms of carbon are there in $4 \mathrm{CH}_{3}\left(\mathrm{CH}_{2}\right)_{3} \mathrm{CH}_{3}$ ?
17. How many atoms of oxygen are there in $5 \mathrm{Ca}(\mathrm{OH})_{2}$ ?
18. How many atoms of nitrogen are there in $8 \mathrm{Mg}\left(\mathrm{NO}_{3}\right)_{2}$ ?
19. How many atoms of oxygen are there in $9 \mathrm{Fe}_{2}\left(\mathrm{SO}_{4}\right)_{3}$ ?
20. How many atoms of hydrogen are there in $5 \mathrm{RhCl}_{3} \cdot 3 \mathrm{H}_{2} \mathrm{O}$ ?
21. How many atoms of oxygen are there in $\mathrm{H}_{2} \mathrm{O}+\mathrm{CO}_{2}$ ?
22. How many atoms of oxygen are there in $2 \mathrm{H}_{2} \mathrm{O}+3 \mathrm{CO}_{2}$ ?
23. How many atoms of nitrogen are there in $4 \mathrm{NH}_{3}+6 \mathrm{~N}_{2} \mathrm{H}_{2}$ ?
24. How many atoms of carbon are there in $3 \mathrm{C}_{3} \mathrm{H}_{8}+5 \mathrm{C}_{6} \mathrm{H}_{14}$ ?
25. How many atoms of hydrogen are there in $6 \mathrm{C}_{3} \mathrm{H}_{8}+3 \mathrm{C}_{6} \mathrm{H}_{14}$ ?
26. How many atoms of oxygen are there in $2 \mathrm{~Pb}\left(\mathrm{NO}_{3}\right)_{2}+8 \mathrm{H}_{2} \mathrm{O}$ ?
27. How many atoms of oxygen are there in $5 \mathrm{Fe}_{2}\left(\mathrm{SO}_{4}\right)_{3}+7 \mathrm{Fe}\left(\mathrm{NO}_{3}\right)_{3}$ ?
28. How many atoms of sulfur are there in $4 \mathrm{Al}_{2}\left(\mathrm{SO}_{4}\right)_{3}+5 \mathrm{H}_{2} \mathrm{~S}+6 \mathrm{SO}_{2}$ ?
29. How many atoms of nitrogen are there in $2\left(\mathrm{NH}_{4}\right)_{3} \mathrm{PO}_{4}+4 \mathrm{Ca}\left(\mathrm{NO}_{3}\right)_{2}+6 \mathrm{Al}\left(\mathrm{NO}_{3}\right)_{3}$ ?
30. How many atoms of hydrogen are there in $3 \mathrm{HCl}+5 \mathrm{H}_{2} \mathrm{O}+7 \mathrm{NH}_{3}+9 \mathrm{CH}_{4}$ ?

- Scan the QR code below to view the answers to this assignment.

http://www.chemist.sg/formulae equations/balance equ 0 ans.pdf

