



BALANCE THE GIVEN CHEMICAL EQUATIONS

Worksheet - 92

- $\text{Cr}_2\text{O}_3 + \text{Na}_2\text{CO}_3 + 3 \text{KNO}_3 = \text{Na}_2\text{CrO}_4 + 2 \text{CO}_2 + 3 \text{KNO}_2$
- $\text{Zn} + 5 \text{H}_2\text{SO}_4 = 4 \text{ZnSO}_4 + \text{H}_2\text{S} + \text{H}_2\text{O}$
- $2 \text{KClO}_3 + \text{H}_2\text{SO}_4 = 2 \text{KHSO}_4 + \text{O}_2 + \text{Cl}_2\text{O} + \text{H}_2\text{O}$
- $\text{FeCr}_2\text{O}_7 + 8 \text{K}_2\text{CO}_3 + \text{O}_2 = 2 \text{Fe}_2\text{O}_3 + \text{K}_2\text{CrO}_4 + 8 \text{CO}_2$
- $10 \text{Al(s)} + \text{NH}_4\text{ClO}_4\text{(s)} = \text{Al}_2\text{O}_3\text{(s)} + 2 \text{AlCl}_3\text{(s)} + 12 \text{H}_2\text{O(g)} + 3 \text{N}_2\text{(g)}$
- $\text{Br}_2 + 6 \text{KOH} = \text{KBrO}_3 + \text{KBr} + 3 \text{H}_2\text{O}$
- $3 \text{Ba(ClO}_3)_2 + \text{Na}_3\text{(PO}_4) = \text{Ba}_3\text{(PO}_4)_2 + \text{Na(ClO}_3)$
- $\text{Al} + 3 \text{Fe}_3\text{O}_4 = \text{Al}_2\text{O}_3 + 9 \text{Fe}$
- $10 \text{HSiCl}_3 + \text{H}_2\text{O} = \text{H}_{10}\text{Si}_{10}\text{O}_{15} + \text{HCl}$
- $\text{NBr}_3 + 3 \text{NaOH} = \text{N}_2 + \text{NaBr} + 3 \text{HOBr}$
- $\text{FeSO}_4 + \text{Pb(NO}_3)_2 = \text{FeNO}_3 + \text{Pb(SO}_4)_2$
- $\text{P}_4\text{S}_{10} + \text{H}_2\text{O} = 4 \text{H}_3\text{PO}_4 + \text{H}_2\text{S}$
- $\text{OH}^{\{-\}} + \text{AsO}_3^{\{-\}} + 10 \text{I}_2 = \text{I}^{\{-\}} + \text{AsO}_4^{\{-\}} + 10 \text{H}_2\text{O}$
- $3 \text{Cu} + \text{HNO}_3 = 3 \text{CuN}_2\text{O}_6 + \text{H}_2\text{O} + 2 \text{NO}$
- $3 \text{Al} + \text{NH}_4\text{ClO}_4 = \text{Al}_2\text{O}_3 + \text{AlCl}_3 + \text{NO} + 6 \text{H}_2\text{O}$
- $4 \text{Pb(C}_2\text{H}_5) + \text{O}_2 = 4 \text{PbO} + 8 \text{CO}_2 + \text{H}_2\text{O}$
- $\text{Ca}_3\text{P}_2 + \text{H}_2\text{O} = 3 \text{Ca(OH)}_2 + \text{PH}_3$
- $\text{H} + 3 \text{Cr}_2\text{O}_7^{\{-\}2} + 3 \text{H}_2\text{SO}_3 = \text{Cr}_3 + 3 \text{HSO}_4^{\{-\}} + 18 \text{H}_2\text{O}$
- $\text{Au} + 4 \text{HCl} + \text{HNO}_3 = \text{HAuCl}_4 + \text{NO}_2 + 3 \text{H}_2\text{O}$
- $\text{Ag(C}_2\text{H}_3\text{O}_2) + \text{Na}_3\text{P} = \text{Ag}_3\text{P} + \text{Na(C}_2\text{H}_3\text{O}_2)$



ANSWERS

1. $\text{Cr}_2\text{O}_3 + 2 \text{Na}_2\text{CO}_3 + 3 \text{KNO}_3 = 2 \text{Na}_2\text{CrO}_4 + 2 \text{CO}_2 + 3 \text{KNO}_2$
2. $4 \text{Zn} + 5 \text{H}_2\text{SO}_4 = 4 \text{ZnSO}_4 + \text{H}_2\text{S} + 4 \text{H}_2\text{O}$
3. $2 \text{KClO}_3 + 2 \text{H}_2\text{SO}_4 = 2 \text{KHSO}_4 + 4 \text{O} + \text{Cl}_2\text{O} + \text{H}_2\text{O}$
4. $4 \text{FeCr}_2\text{O}_7 + 8 \text{K}_2\text{CO}_3 + \text{O}_2 = 2 \text{Fe}_2\text{O}_3 + 8 \text{K}_2\text{CrO}_4 + 8 \text{CO}_2$
5. $10 \text{Al}(s) + 6 \text{NH}_4\text{ClO}_4(s) = 4 \text{Al}_2\text{O}_3(s) + 2 \text{AlCl}_3(s) + 12 \text{H}_2\text{O}(g) + 3 \text{N}_2(g)$
6. $3 \text{Br}_2 + 6 \text{KOH} = \text{KBrO}_3 + 5 \text{KBr} + 3 \text{H}_2\text{O}$
7. $3 \text{Ba}(\text{ClO}_3)_2 + 2 \text{Na}_3(\text{PO}_4) = \text{Ba}_3(\text{PO}_4)_2 + 6 \text{Na}(\text{ClO}_3)$
8. $8 \text{Al} + 3 \text{Fe}_3\text{O}_4 = 4 \text{Al}_2\text{O}_3 + 9 \text{Fe}$
9. $10 \text{HSiCl}_3 + 15 \text{H}_2\text{O} = \text{H}_{10}\text{Si}_{10}\text{O}_{15} + 30 \text{HCl}$
10. $2 \text{NBr}_3 + 3 \text{NaOH} = \text{N}_2 + 3 \text{NaBr} + 3 \text{HOBr}$
11. $2 \text{FeSO}_4 + \text{Pb}(\text{NO}_3)_2 = 2 \text{FeNO}_3 + \text{Pb}(\text{SO}_4)_2$
12. $\text{P}_4\text{S}_{10} + 16 \text{H}_2\text{O} = 4 \text{H}_3\text{PO}_4 + 10 \text{H}_2\text{S}$
13. $20 \text{OH}^{\{-\}} + \text{AsO}_3^{\{-\}} + 10 \text{I}_2 = 20 \text{I}^{\{-\}} + \text{AsO}_4^{\{-\}} + 10 \text{H}_2\text{O}$
14. $3 \text{Cu} + 8 \text{HNO}_3 = 3 \text{CuN}_2\text{O}_6 + 4 \text{H}_2\text{O} + 2 \text{NO}$
15. $3 \text{Al} + 3 \text{NH}_4\text{ClO}_4 = \text{Al}_2\text{O}_3 + \text{AlCl}_3 + 3 \text{NO} + 6 \text{H}_2\text{O}$
16. $4 \text{Pb}(\text{C}_2\text{H}_5) + 15 \text{O}_2 = 4 \text{PbO} + 8 \text{CO}_2 + 10 \text{H}_2\text{O}$
17. $\text{Ca}_3\text{P}_2 + 6 \text{H}_2\text{O} = 3 \text{Ca}(\text{OH})_2 + 2 \text{PH}_3$
18. $33 \text{H} + 3 \text{Cr}_2\text{O}_7^{\{-2\}} + 3 \text{H}_2\text{SO}_3 = 2 \text{Cr}_3 + 3 \text{HSO}_4^{\{-1\}} + 18 \text{H}_2\text{O}$
19. $\text{Au} + 4 \text{HCl} + 3 \text{HNO}_3 = \text{HAuCl}_4 + 3 \text{NO}_2 + 3 \text{H}_2\text{O}$
20. $3 \text{Ag}(\text{C}_2\text{H}_3\text{O}_2) + \text{Na}_3\text{P} = \text{Ag}_3\text{P} + 3 \text{Na}(\text{C}_2\text{H}_3\text{O}_2)$



Thanks for downloading our free printable.

We have thousands of such resources in our blog for teachers and parents.

[You can download them for free here!](#)

Free Printables from Go Science Girls – Fair Usage Policy

You can ...

- Download and save this free printable from gosciencegirls.com to your computer.
- Print this file and use it as many times as you want in your home, classrooms or for your library.
- Feel free to link our blog post where your visitors can find and download this printable for free.
- When you post online about this resource – please give due credit to gosciencegirls.com

You Cannot ...

- Access this file or download it from other sites apart from gosciencegirls.com
- Other websites cannot link to this pdf directly. If required, they are welcomed to link to the blog post from where this pdf can be downloaded.
- The ownership of this pdf rests with GoScienceGirls. No one can claim ownership for this file.
- You are not allowed to sell printed copies of this file to others.
- You are not allowed to store this file electronically and redistribute it (only personal use is allowed).

Further Questions?

Feel free to email us at contactgosciencegirls@gmail.com for any further questions and suggestions. We would love to hear from you. We promise to respond back as soon as we can.