



BALANCE THE GIVEN CHEMICAL EQUATIONS

Worksheet - 81

1. $\text{H}_2\text{SO}_4 + \text{Ca}_3\text{P}_2 = 8 \text{SO}_2 + \text{H}_2\text{O} + \text{Ca}_3(\text{PO}_4)_2$
2. $\text{Li}_2 + \text{S} = \text{Li}_6\text{S}$
3. $\text{KHCO}_3 + \text{H}_3\text{PO}_4 = \text{K}_2\text{HPO}_4 + \text{H}_2\text{O} + 2 \text{CO}_2$
4. $6 \text{H}_2\text{O} + \text{CO}_2 = \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
5. $4 \text{HAuCl}_4 + \text{C} + 6 \text{H}_2\text{O} = \text{Au} + 16 \text{HCl} + 3 \text{CO}_2$
6. $\text{Na}_3\text{N} + 3 \text{H}_2\text{O} = \text{NH}_3 + 3 \text{Na}_2\text{O}$
7. $\text{CF}_4 + \text{Br}_2 = \text{CBr}_4 + \text{F}_2$
8. $\text{Hg} + 2 \text{HNO}_3 + 6 \text{HCl} = \text{HgCl}_2 + 2 \text{NO} + 4 \text{H}_2\text{O}$
9. $\text{MoS}_2 + 14 \text{HNO}_3 = \text{H}_2\text{O} + 5 \text{MoO}_3 + 7 \text{N}_2 + 10 \text{SO}_2$
10. $4 (\text{NH}_4)_3\text{PO}_4 + \text{Pb}(\text{NO}_3)_4 = \text{Pb}_3(\text{PO}_4)_4 + \text{NH}_4\text{NO}_3$
11. $\text{Si}_4\text{H}_{10} + 13 \text{O}_2 = \text{SiO}_2 + 10 \text{H}_2\text{O}$
12. $4 \text{HCl} + 3 \text{As}_2\text{O}_3 + \text{NaNO}_3 + 7 \text{H}_2\text{O} = \text{NO} + 6 \text{H}_3\text{AsO}_4 + 4 \text{NaCl}$
13. $\text{Sr}(\text{s}) + \text{O}_2(\text{g}) = \text{SrO}(\text{s})$
14. $4 \text{KO}_2 + \text{CO}_2 = 3 \text{O}_2 + \text{K}_2\text{CO}_3$
15. $\text{CuO} + \text{CH}_4 = 4 \text{Cu} + \text{CO}_2 + \text{H}_2\text{O}$
16. $\text{Zn}_3\text{Sb}_2 + \text{H}_2\text{O} = \text{Zn}(\text{OH})_2 + 2 \text{SbH}_3$
17. $\text{Cr}_2\text{O}_7^{2-} + \text{HS}^{-} + 11 \text{H}^{+} = 2 \text{Cr}^{3+} + \text{S} + 7 \text{H}_2\text{O}$
18. $4 \text{Ag}(\text{s}) + \text{H}_2\text{S}(\text{g}) + \text{O}_2 = \text{Ag}_2\text{S}(\text{s}) + 2 \text{H}_2\text{O}(\text{g})$
19. $\text{H}_2\text{O} + \text{I}_2 + 15 \text{Na}_2\text{SO}_4 = \text{HIO}_3 + 15 \text{Na}_2\text{S}$
20. $3 \text{CaCl}_2 + \text{Na}_3\text{PO}_4 = \text{Ca}_3(\text{PO}_4)_2 + \text{NaCl}$



ANSWERS

1. $8 \text{H}_2\text{SO}_4 + \text{Ca}_3\text{P}_2 = 8 \text{SO}_2 + 8 \text{H}_2\text{O} + \text{Ca}_3(\text{PO}_4)_2$
2. $3 \text{Li}_2 + \text{S} = \text{Li}_6\text{S}$
3. $2 \text{KHCO}_3 + \text{H}_3\text{PO}_4 = \text{K}_2\text{HPO}_4 + 2 \text{H}_2\text{O} + 2 \text{CO}_2$
4. $6 \text{H}_2\text{O} + 6 \text{CO}_2 = \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{O}_2$
5. $4 \text{HAuCl}_4 + 3 \text{C} + 6 \text{H}_2\text{O} = 4 \text{Au} + 16 \text{HCl} + 3 \text{CO}_2$
6. $2 \text{Na}_3\text{N} + 3 \text{H}_2\text{O} = 2 \text{NH}_3 + 3 \text{Na}_2\text{O}$
7. $\text{CF}_4 + 2 \text{Br}_2 = \text{CBr}_4 + 2 \text{F}_2$
8. $3 \text{Hg} + 2 \text{HNO}_3 + 6 \text{HCl} = 3 \text{HgCl}_2 + 2 \text{NO} + 4 \text{H}_2\text{O}$
9. $5 \text{MoS}_2 + 14 \text{HNO}_3 = 7 \text{H}_2\text{O} + 5 \text{MoO}_3 + 7 \text{N}_2 + 10 \text{SO}_2$
10. $4 (\text{NH}_4)_3\text{PO}_4 + 3 \text{Pb}(\text{NO}_3)_4 = \text{Pb}_3(\text{PO}_4)_4 + 12 \text{NH}_4\text{NO}_3$
11. $2 \text{Si}_4\text{H}_{10} + 13 \text{O}_2 = 8 \text{SiO}_2 + 10 \text{H}_2\text{O}$
12. $4 \text{HCl} + 3 \text{As}_2\text{O}_3 + 4 \text{NaNO}_3 + 7 \text{H}_2\text{O} = 4 \text{NO} + 6 \text{H}_3\text{AsO}_4 + 4 \text{NaCl}$
13. $2 \text{Sr}(\text{s}) + \text{O}_2(\text{g}) = 2 \text{SrO}(\text{s})$
14. $4 \text{KO}_2 + 2 \text{CO}_2 = 3 \text{O}_2 + 2 \text{K}_2\text{CO}_3$
15. $4 \text{CuO} + \text{CH}_4 = 4 \text{Cu} + \text{CO}_2 + 2 \text{H}_2\text{O}$
16. $\text{Zn}_3\text{Sb}_2 + 6 \text{H}_2\text{O} = 3 \text{Zn}(\text{OH})_2 + 2 \text{SbH}_3$
17. $\text{Cr}_2\text{O}_7^{2-} + 3 \text{HS}^- + 11 \text{H}^+ = 2 \text{Cr}^{3+} + 3 \text{S} + 7 \text{H}_2\text{O}$
18. $4 \text{Ag}(\text{s}) + 2 \text{H}_2\text{S}(\text{g}) + \text{O}_2 = 2 \text{Ag}_2\text{S}(\text{s}) + 2 \text{H}_2\text{O}(\text{g})$
19. $\text{H}_2\text{O} + 10 \text{I}_2 + 15 \text{Na}_2\text{SO}_4 = 20 \text{HIO}_3 + 15 \text{Na}_2\text{S}$
20. $3 \text{CaCl}_2 + 2 \text{Na}_3\text{PO}_4 = \text{Ca}_3(\text{PO}_4)_2 + 6 \text{NaCl}$



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