



BALANCE THE GIVEN CHEMICAL EQUATIONS

Worksheet - 21

- $\text{CH}_3(\text{CH}_2)_5\text{CH}_3 + \text{O}_2 = 7 \text{CO}_2 + \text{H}_2\text{O}$
- $\text{C}_3\text{H}_8\text{O} + 9 \text{O}_2 = \text{CO}_2 + 8 \text{H}_2\text{O}$
- $\text{Ca}(\text{NO}_3)_2 + \text{NH}_4\text{F} = \text{CaF}_2 + 2 \text{N}_2\text{O} + \text{H}_2\text{O}$
- $\text{C}_3\text{H}_6 + 9 \text{O}_2 = \text{CO}_2 + 6 \text{H}_2\text{O}$
- $\text{N}_2\text{O}_4 = \text{NO}_2$
- $\text{C}_3\text{H}_8 + 7 \text{O}_2 = \text{CO} + 8 \text{H}_2\text{O}$
- $\text{CaCO}_3 + \text{HNO}_3 = \text{Ca}(\text{NO}_3)_2 + \text{CO}_2 + \text{H}_2\text{O}$
- $\text{C}_6\text{H}_{10}\text{O}_2 + 15 \text{O}_2 = 12 \text{CO}_2 + \text{H}_2\text{O}$
- $2 \text{H}_2\text{O} + \text{Na} = \text{H}_2 + \text{NaOH}$
- $\text{HNO}_3 = \text{NO}_2 + \text{H}_2\text{O} + 10 \text{O}_2$
- $2 \text{Sr} + \text{HCl} = 2 \text{SrCl} + \text{H}_2$
- $\text{Fe}_2\text{O}_3 + 3 \text{C} = \text{Fe} + 3 \text{CO}_2$
- $\text{SO}_2 + \text{O}_2 = \text{SO}_3$
- $2 \text{HNO}_3 + \text{FeSO}_4 + 3 \text{H}_2\text{SO}_4 = \text{Fe}_2(\text{SO}_4)_3 + 2 \text{NO} + 4 \text{H}_2\text{O}$
- $\text{NH}_3 + 5 \text{O}_2 = \text{NO} + 6 \text{H}_2\text{O}$
- $\text{MnO}_2 + \text{HCl} = \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
- $\text{NiCl} + \text{O} = \text{Ni}_2\text{O} + \text{Cl}$
- $\text{CH}_3\text{COCH}_3 + 3 \text{I}_2 + \text{NaOH} = \text{CH}_3\text{COCl}_3 + \text{NaI} + 3 \text{H}_2\text{O}$
- $2 \text{C}_8\text{H}_{18} + \text{O}_2 = \text{CO}_2 + 18 \text{H}_2\text{O}$
- $\text{NH}_3 + 5 \text{O}_2 = \text{NO} + 6 \text{H}_2\text{O}$



ANSWERS

1. $\text{CH}_3(\text{CH}_2)_5\text{CH}_3 + 11 \text{O}_2 = 7 \text{CO}_2 + 8 \text{H}_2\text{O}$
2. $2 \text{C}_3\text{H}_8\text{O} + 9 \text{O}_2 = 6 \text{CO}_2 + 8 \text{H}_2\text{O}$
3. $\text{Ca}(\text{NO}_3)_2 + 2 \text{NH}_4\text{F} = \text{CaF}_2 + 2 \text{N}_2\text{O} + 4 \text{H}_2\text{O}$
4. $2 \text{C}_3\text{H}_6 + 9 \text{O}_2 = 6 \text{CO}_2 + 6 \text{H}_2\text{O}$
5. $\text{N}_2\text{O}_4 = 2 \text{NO}_2$
6. $2 \text{C}_3\text{H}_8 + 7 \text{O}_2 = 6 \text{CO} + 8 \text{H}_2\text{O}$
7. $\text{CaCO}_3 + 2 \text{HNO}_3 = \text{Ca}(\text{NO}_3)_2 + \text{CO}_2 + \text{H}_2\text{O}$
8. $2 \text{C}_6\text{H}_{10}\text{O}_2 + 15 \text{O}_2 = 12 \text{CO}_2 + 10 \text{H}_2\text{O}$
9. $2 \text{H}_2\text{O} + 2 \text{Na} = \text{H}_2 + 2 \text{NaOH}$
10. $20 \text{HNO}_3 = 20 \text{NO}_2 + \text{H}_2\text{O} + 10 \text{O}_2$
11. $2 \text{Sr} + 2 \text{HCl} = 2 \text{SrCl} + \text{H}_2$
12. $2 \text{Fe}_2\text{O}_3 + 3 \text{C} = 4 \text{Fe} + 3 \text{CO}_2$
13. $2 \text{SO}_2 + \text{O}_2 = 2 \text{SO}_3$
14. $2 \text{HNO}_3 + 6 \text{FeSO}_4 + 3 \text{H}_2\text{SO}_4 = 3 \text{Fe}_2(\text{SO}_4)_3 + 2 \text{NO} + 4 \text{H}_2\text{O}$
15. $4 \text{NH}_3 + 5 \text{O}_2 = 4 \text{NO} + 6 \text{H}_2\text{O}$
16. $\text{MnO}_2 + 4 \text{HCl} = \text{MnCl}_2 + \text{Cl}_2 + 2 \text{H}_2\text{O}$
17. $2 \text{NiCl} + \text{O} = \text{Ni}_2\text{O} + 2 \text{Cl}$
18. $\text{CH}_3\text{COCH}_3 + 3 \text{I}_2 + 3 \text{NaOH} = \text{CH}_3\text{COCl}_3 + 3 \text{NaI} + 3 \text{H}_2\text{O}$
19. $2 \text{C}_8\text{H}_{18} + 25 \text{O}_2 = 16 \text{CO}_2 + 18 \text{H}_2\text{O}$
20. $4 \text{NH}_3 + 5 \text{O}_2 = 4 \text{NO} + 6 \text{H}_2\text{O}$



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