

Reaction Types and Balancing Practice

Balance the following chemical equations and indicate the type of the reaction.

		Reaction Type
1.	$\underline{\quad}$ Cu + $\underline{\quad}$ Fe(NO ₃) ₂ → $\underline{\quad}$ Cu(NO ₃) ₂ + $\underline{\quad}$ Fe	<hr/>
2.	$\underline{\quad}$ CaF ₂ + $\underline{\quad}$ H ₂ SO ₄ → $\underline{\quad}$ CaSO ₄ + $\underline{\quad}$ HF	<hr/>
3.	$\underline{\quad}$ Sc ₂ O ₃ → $\underline{\quad}$ Sc + $\underline{\quad}$ O ₂	<hr/>
4.	$\underline{\quad}$ NaOH + $\underline{\quad}$ H ₂ CO ₃ → $\underline{\quad}$ + Na ₂ CO ₃ + $\underline{\quad}$ H ₂ O	<hr/>
5.	$\underline{\quad}$ AgNO ₃ + $\underline{\quad}$ NaCl → $\underline{\quad}$ AgCl + $\underline{\quad}$ NaNO ₃	<hr/>
6.	$\underline{\quad}$ Al(OH) ₃ + $\underline{\quad}$ H ₂ SO ₄ → $\underline{\quad}$ Al ₂ (SO ₄) ₃ + $\underline{\quad}$ H ₂ O	<hr/>
7.	$\underline{\quad}$ K + $\underline{\quad}$ O ₂ → $\underline{\quad}$ K ₂ O	<hr/>
8.	$\underline{\quad}$ Ba(OH) ₂ + $\underline{\quad}$ H ₂ SO ₄ → $\underline{\quad}$ BaSO ₄ + $\underline{\quad}$ H ₂ O	<hr/>
9.	$\underline{\quad}$ Al ₂ (SO ₄) ₃ + $\underline{\quad}$ Ca(OH) ₂ → $\underline{\quad}$ Al(OH) ₃ + $\underline{\quad}$ CaSO ₄	<hr/>
10.	$\underline{\quad}$ Cu + $\underline{\quad}$ AgNO ₃ → $\underline{\quad}$ Ag + $\underline{\quad}$ CuNO ₃	<hr/>
11.	$\underline{\quad}$ Na + $\underline{\quad}$ Cl ₂ → $\underline{\quad}$ NaCl	<hr/>
12.	$\underline{\quad}$ Ca ₃ (PO ₄) ₂ + $\underline{\quad}$ H ₂ SO ₄ → $\underline{\quad}$ CaSO ₄ + $\underline{\quad}$ H ₃ PO ₄	<hr/>
13.	$\underline{\quad}$ BaSO ₄ + $\underline{\quad}$ CuCl ₂ → $\underline{\quad}$ CuSO ₄ + $\underline{\quad}$ BaCl ₂	<hr/>
14.	$\underline{\quad}$ C ₃ H ₈ + $\underline{\quad}$ O ₂ → $\underline{\quad}$ CO ₂ + $\underline{\quad}$ H ₂ O	<hr/>
15.	$\underline{\quad}$ Zn + $\underline{\quad}$ CuSO ₄ → $\underline{\quad}$ ZnSO ₄ + $\underline{\quad}$ Cu	<hr/>
16.	$\underline{\quad}$ H ₂ SO ₄ + $\underline{\quad}$ Zn → $\underline{\quad}$ Zn ₂ SO ₄ + $\underline{\quad}$ H ₂	<hr/>
17.	$\underline{\quad}$ O ₂ + $\underline{\quad}$ CH ₄ → $\underline{\quad}$ CO ₂ + $\underline{\quad}$ H ₂ O	<hr/>
18.	$\underline{\quad}$ CaO + $\underline{\quad}$ Al → $\underline{\quad}$ Al ₂ O ₃ + $\underline{\quad}$ Ca	<hr/>
19.	$\underline{\quad}$ Cl ₂ + $\underline{\quad}$ NaBr → $\underline{\quad}$ NaCl + $\underline{\quad}$ Br ₂	<hr/>
20.	$\underline{\quad}$ Pb(NO ₃) ₂ + $\underline{\quad}$ NaI → $\underline{\quad}$ NaNO ₃ + $\underline{\quad}$ PbI ₂	<hr/>

21. $\text{Fe} + \text{Cu}(\text{NO}_3)_2 \rightarrow \text{Cu} + \text{Fe}(\text{NO}_3)_2$ _____
22. $\text{CaCO}_3 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{CO}_2 + \text{H}_2\text{O}$ _____
23. $\text{KNO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{HNO}_3$ _____
24. $\text{Li}_2\text{CO}_3 \rightarrow \text{Li}_2\text{O} + \text{CO}_2$ _____
25. $\text{C}_2\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ _____
26. $\text{CO}_2 + \text{Na}_2\text{O} \rightarrow \text{Na}_2\text{CO}_3$ _____
27. $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$ _____
28. $\text{KOH} + \text{H}_3\text{PO}_4 \rightarrow \text{K}_3\text{PO}_4 + \text{H}_2\text{O}$ _____
29. $\text{Zn} + \text{CuCl}_2 \rightarrow \text{ZnCl}_2 + \text{Cu}$ _____
30. $\text{BaO} + \text{H}_2\text{O} \rightarrow \text{Ba}(\text{OH})_2$ _____
31. $\text{KI} + \text{Br}_2 \rightarrow \text{KBr} + \text{I}_2$ _____
32. $\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ _____
33. $\text{AgNO}_3 + \text{ZnCl}_2 \rightarrow \text{AgCl} + \text{Zn}(\text{NO}_3)_2$ _____
34. $\text{Na}_2\text{SO}_4 + \text{Ba}(\text{NO}_3)_2 \rightarrow \text{BaSO}_4 + \text{NaNO}_3$ _____
35. $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$ _____
36. $\text{NaCl} \rightarrow \text{Na} + \text{Cl}_2$ _____
37. $\text{CH}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ _____
38. $\text{Fe} + \text{H}_2\text{SO}_4 \rightarrow \text{FeSO}_4 + \text{H}_2$ _____
39. $\text{H}_2\text{CO}_3 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ _____
40. $\text{CuSO}_4 + \text{Na}_2\text{S} \rightarrow \text{CuS} + \text{Na}_2\text{SO}_4$ _____
41. $\text{Cl}_2 + \text{NaBr} \rightarrow \text{NaCl} + \text{Br}_2$ _____
42. $\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$ _____
43. $\text{NaClO}_3 \rightarrow \text{NaCl} + \text{O}_2$ _____

44. _____ Ca + _____ H₂O → _____ Ca(OH)₂ + _____ H₂ _____
45. _____ Na + _____ Br₂ → _____ NaBr _____
46. _____ Cu(OH)₂ + _____ HC₂H₃O₂ → _____ Cu(C₂H₃O₂)₂ + _____ H₂O _____
47. _____ Ag + _____ S → _____ Ag₂S _____
48. _____ C₃H₈ + _____ O₂ → _____ CO₂ + _____ H₂O _____
49. _____ H₂O₂ → _____ H₂O + _____ O₂ _____
50. _____ H₂SO₄ + _____ NH₄OH → _____ (NH₄)₂SO₄ + _____ H₂O _____