

Packet for Test 4

Worksheet Balancing Equations Chapter 10

The number at the end of the equation is the sum of the coefficients used to balance the equation. Understood ones are not included in the sum of the coefficients.

- _____ 1. $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$ (2)
- _____ 2. $\text{NH}_3 + \text{HCl} \rightarrow \text{NH}_4\text{Cl}$ (0)
- _____ 3. $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2$ (13)
- _____ 4. $\text{Mg} + \text{H}_3\text{PO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{H}_2$ (8)
- _____ 5. $\text{Cu} + \text{AgNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{Ag}$ (4)
- _____ 6. $\text{Ca} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{Pb} + \text{Ca}(\text{NO}_3)_2$ (0)
- _____ 7. $\text{Al} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{Pb} + \text{Al}(\text{NO}_3)_3$ (10)
- _____ 8. $\text{Zn} + \text{Sn}(\text{NO}_3)_4 \rightarrow \text{Zn}(\text{NO}_3)_2 + \text{Sn}$ (4)
- _____ 9. $\text{Cl}_2 + \text{AlI}_3 \rightarrow \text{AlCl}_3 + \text{I}_2$ (10)
- _____ 10. $\text{Br}_2 + \text{CuI} \rightarrow \text{CuBr} + \text{I}_2$ (4)
- _____ 11. $\text{NH}_4\text{OH} + \text{FeCl}_3 \rightarrow \text{NH}_4\text{Cl} + \text{Fe}(\text{OH})_3$ (6)
- _____ 12. $\text{KBr} + \text{Pb}(\text{NO}_3)_2 \rightarrow \text{KNO}_3 + \text{PbBr}_2$ (4)
- _____ 13. $\text{AlCl}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{HCl}$ (11)
- _____ 14. $\text{Al}_2(\text{SO}_4)_3 + \text{BaCl}_2 \rightarrow \text{BaSO}_4 + \text{AlCl}_3$ (8)
- _____ 15. $\text{Na}_2\text{CO}_3 + \text{CaCl}_2 \rightarrow \text{CaCO}_3 + \text{NaCl}$ (2)
- _____ 16. $\text{H}_2\text{SO}_4 + \text{AlBr}_3 \rightarrow \text{HBr} + \text{Al}_2(\text{SO}_4)_3$ (11)
- _____ 17. $\text{Na}_3\text{PO}_4 + \text{BaCl}_2 \rightarrow \text{Ba}_3(\text{PO}_4)_2 + \text{NaCl}$ (11)
- _____ 18. $\text{K}_3\text{PO}_4 + \text{MgSO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{K}_2\text{SO}_4$ (8)
- _____ 19. $\text{NaOH} + \text{CuSO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{Cu}(\text{OH})_2$ (2)
- _____ 20. $\text{Mg}(\text{OH})_2 + \text{H}_2\text{SO}_4 \rightarrow \text{MgSO}_4 + \text{H}_2\text{O}$ (2)