



DPP # 2 (SOLUTION)

- Q. Balance the following equations by adding coefficients before the elements or compounds.
- 1. $C + O_2 \longrightarrow CO_2$
- 2. $2C + O_2 \longrightarrow 2CO$
- 3. $2H_2 + O_2 \longrightarrow 2H_2O$
- 4. $2Na + Cl_2 \longrightarrow 2NaCl$
- $5. \qquad 4P + 5O_2 \longrightarrow 2P_2O_5$
- 6. $S_8 + 12O_2 \longrightarrow 8SO_3$
- 7. $2H_2O + O_2 \longrightarrow 2H_2O_2$
- 8. $N_2 + 3H_2 \longrightarrow 2NH_3$
- 9. $3C + 4H_2 \longrightarrow C_3H_8$
- **10.** $4C + 3H_2 \longrightarrow C_4H_6$
- 11. $2O_3 \longrightarrow 3O_2$
- 12. $C_3H_8 + 5O_2 \longrightarrow 3CO_2 + 4H_2O$
- 13. $C_2H_6 + \frac{7}{2} O_2 \longrightarrow 2CO_2 + 3H_2O$
- **14.** $C_4H_8 + 6O_2 \longrightarrow 4CO_2 + 4H_2O$
- 15. $C_xH_y + \left(x + \frac{y}{4} \mid O_2 \longrightarrow xCO_2 + \frac{y}{2}H_2O\right)$
- 16. $PCl_5 + 4H_2O \longrightarrow H_3PO_4 + 5HCl$
- 17. NaOH + HCl \longrightarrow NaCl + H₂O
- 18. $2KOH + H_2CO_3 \longrightarrow K_2CO_3 + 2H_2O$
- 19. $Ba(OH)_2 + H_2SO_4 \longrightarrow BaSO_4 + 2H_2O$





20. $3KOH + H_3PO_4 \longrightarrow K_3PO_4 + 3H_2O_3$

21.
$$3Ba(OH)_2 + 2H_3PO_4 \longrightarrow Ba_3(PO_4)_2 + 6H_2O$$

22.
$$Pb(OH)_4 + 2Cu_2O \longrightarrow PbO_2 + 4CuOH$$

23.
$$2NaNO_3 + PbO \longrightarrow Pb(NO_3)_2 + Na_2O$$

24.
$$3KBr + Fe(OH)_3 \longrightarrow 3KOH + FeBr_3$$

25.
$$3ZnS + 2AlP \longrightarrow Zn_3P_2 + Al_2S_3$$

26.
$$CaSiO_3 + 6HF \longrightarrow SiF_4 + CaF_2 + 3H_2O$$

27.
$$6Cl_2 + 6Ca(OH)_2 \longrightarrow Ca(ClO_3)_2 + 5CaCl_2 + 6H_2O$$

28.
$$Ca(ClO_3)_2 + Na_2SO_4 \rightarrow CaSO_4 + 2NaClO_3$$

29.
$$P_4S_3 + 8O_2 \longrightarrow P_4O_{10} + 3SO_2$$

30.
$$2KMnO_4 + 16HCl \longrightarrow 2KCl + 2MnCl_2 + 8H_2O + 5Cl_2$$