



Oxidation and Reduction

Answer sheet in the last

Show oxidation and reduction and also state the oxidising and reducing agent

- $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$
- $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow \text{S} + \text{HCl}$
- $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$
- $\text{MnO}_2 + \text{HCl} \rightarrow \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
- $\text{Cu} + \text{O}_2 \rightarrow \text{CuO}$
- $\text{SO}_2 + \text{H}_2\text{S} \rightarrow \text{H}_2\text{O} + \text{S}$
- $\text{H}_2\text{S} + \text{I}_2 \rightarrow \text{HI} + \text{S}$
- $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$
- $\text{PbO} + \text{C} \rightarrow \text{Pb} + \text{CO}$
- $\text{K} + \text{Cl}_2 \rightarrow \text{KCl}$
- $\text{Fe} + \text{H}_2\text{SO}_4 \rightarrow \text{Fe}_2(\text{SO}_4)_3 + \text{H}_2$
- $\text{NH}_3 + \text{O}_2 \rightarrow \text{NO} + \text{H}_2\text{O}$
- $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$
- $\text{Fe}_2\text{O}_3 + \text{CO} \rightarrow \text{Fe} + \text{CO}_2$
- $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2$
- $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
- $\text{Zn} + \text{AgNO}_3 \rightarrow \text{Zn}(\text{NO}_3)_2 + \text{Ag}$
- $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
- $\text{SiO}_2 + \text{HF} \rightarrow \text{SiF}_4 + \text{H}_2\text{O}$
- $\text{C}_{10}\text{H}_{16} + \text{Cl}_2 \rightarrow \text{C} + \text{HCl}$



Oxidation and reduction answers

1. CuO reduced and H₂ oxidised
CuO oxidising agent and H₂ reducing agent
2. H₂S oxidised and Cl₂ reduced
H₂S reducing agent and Cl₂ oxidising agent
3. ZnO is reduced and C is oxidised
ZnO is oxidising agent and C is reducing agent
4. MnO₂ reduced and HCl oxidised
MnO₂ oxidising agent and HCl reducing agent
5. Cu oxidised and O₂ reduced
Cu reducing agent and O₂ oxidising agent
6. SO₂ reduced and H₂S oxidised
SO₂ oxidising agent and H₂S reducing agent
7. H₂S oxidised and I₂ reduced
H₂S reducing agent and I₂ oxidising agent
8. Na oxidised and O₂ reduced
Na reducing agent and O₂ oxidising agent
9. PbO reduced and C oxidised
PbO oxidising agent and C reducing agent
10. K oxidised and Cl₂ reducing agent
K reducing agent and Cl₂ oxidising agent
11. Fe is oxidised and H₂SO₄ is reduced
Fe is reducing agent and H₂SO₄ is oxidising agent
12. NH₃ is oxidised and O₂ is reduced
NH₃ is reducing agent and O₂ is oxidising agent
13. N₂ is reduced and H₂ is oxidised
N₂ is oxidising agent and H₂ is reducing agent



14. Fe_2O_3 is reduced and CO is oxidised

Fe_2O_3 is oxidising agent and CO is reducing agent

15. Al is oxidised and HCl is reduced

Al is reducing agent and HCl is oxidising agent

16. H_2 is oxidised and N_2 is reduced

H_2 is reducing agent and N_2 is oxidising agent

17. Zn is oxidised and AgNO_3 is reduced

Zn is reducing agent and AgNO_3 is oxidising agent

18. Mg is oxidised and N_2 is reduced

Mg is reducing agent and N_2 is oxidising agent

19. SiO_2 is reduced and HF is oxidised

SiO_2 is oxidising agent and HF is reducing agent

20. $\text{C}_{10}\text{H}_{16}$ is oxidised and Cl_2 is reduced

$\text{C}_{10}\text{H}_{16}$ is reducing agent and Cl_2 is oxidising agent