

## CHEMICAL REACTION TYPES - #1

Write balanced chemical equations for...

1. Hydrogen gas and chlorine gas explode when exposed to light.
2. Sulphuric acid is reacted with sodium hydrogen carbonate.
3. Solutions of barium nitrate and sodium sulphate react.
4. Ethane gas ( $\text{C}_2\text{H}_6$ ) burns completely in air.
5. Nitrogen gas and hydrogen gas combine.
6. Lead(IV) oxide is decomposed by heat.
7. Silver nitrate solution reacts with sodium chloride solution.
8. Potassium metal reacts on cold water.
9. Aluminum oxide is dissolved in water.
10. Zinc metal reacts in a solution of copper(II) nitrate.
11. Chlorine gas is bubbled through a solution of sodium iodide.
12. Molten sodium chloride is decomposed by electrolysis.
13. Nitric acid solution is added to sodium hydroxide solution.
14. Sulphur dioxide gas is bubbled into water.
15. Phosphoric acid neutralized a solution of magnesium hydroxide.
16. Magnesium metal reacts slowly in cold water.
17. Calcium carbonate is etched by hydrochloric acid solution.
18. Gasoline ( $\text{C}_8\text{H}_{18}$ ) burns incompletely in air. No solid products are formed.
19. Iron(III) chloride solution reacts with calcium metal.
20. Copper metal reacts is sulphur vapour.
21. Hydrogen sulphide gas is bubbled through arsenic(III) chloride solution.
22. Aluminum iodide is heated strongly in the absence of air.
23. Calcium hydrogen carbonate is added to sulphuric acid solution.
24. Sulphuric acid reacts with potassium hydroxide solution.
25. Iron forms rust in damp air.