

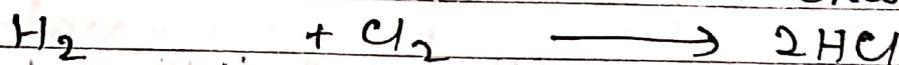
Q- Why should a magnesium ribbon be cleaned before burning in air?

Ans. A protective layer basic magnesium carbonate ~~in it~~ gets deposited on magnesium ribbon after some time. Due to this, it is essential to remove this protective layer to facilitate burning of magnesium ribbon in air.

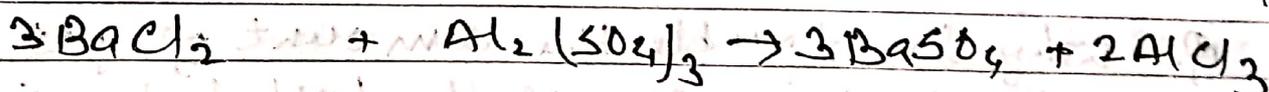
Q- Write balanced chemical ^{equations} ~~reactions~~ for the following chemical reactions:

Ans.

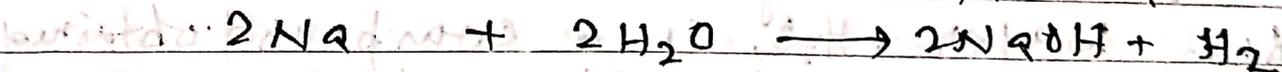
Hydrogen + chlorine \rightarrow Hydrogen chloride



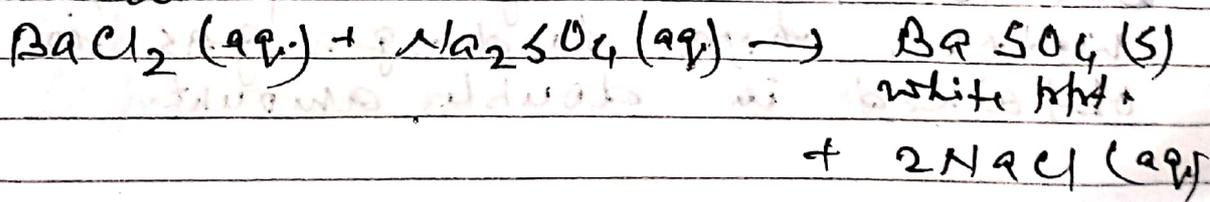
Barium Chloride + Aluminium Sulphate \rightarrow Barium Sulphate + Aluminium chloride



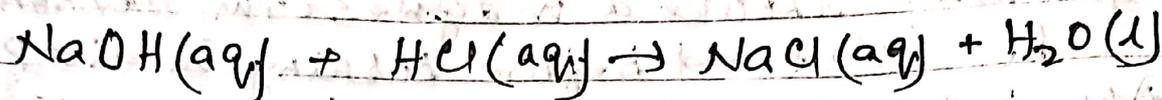
Sodium + water \rightarrow Sodium hydroxide + Hydrogen



* Solutions of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and sodium chloride.



* Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride and water.



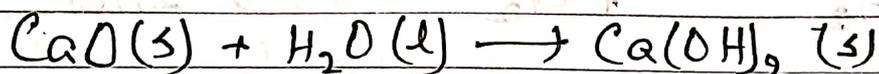
It is neutralisation reaction.

Q. A solution of substance X is used for white washing.

(a) Name the substance X.

Ans. The substance X is calcium oxide, CaO, (also known as lime, quick lime or choona) whose solution in water is used for white washing.

(b) Write the reaction of the substance X with water.

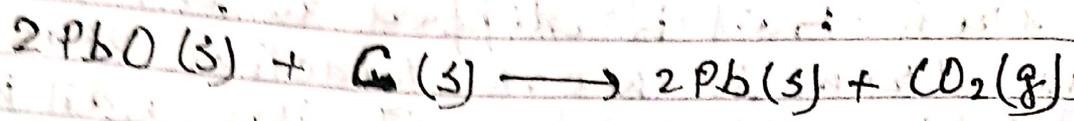


Calcium oxide. Calcium hydroxide.

Q. Why is double the amount of gas collected in one of the test-tubes in the electrolysis of water activity? Name this gas.

Ans. Water, H_2O , is a compound obtained by the combination of hydrogen and oxygen in ratio 2:1 by mass. It means water contains 2 parts of hydrogen and 1 part of oxygen in it. Due to this during electrolysis of water, ~~hydrogen~~ hydrogen gas is obtained in double amount.

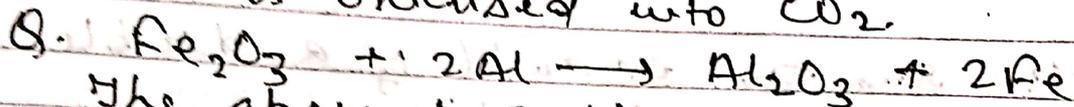
Q. Which of the statements about the reaction below are incorrect?



- (A) Lead is getting reduced.
- (B) Carbon dioxide is getting oxidised.
- (C) Carbon is getting oxidised.
- (D) Lead oxide is getting reduced.

Ans. Statements (A) and (B) are incorrect.

This is due to the reason that PbO is reduced into Pb and C is oxidised into CO₂.



The above reaction is an example of

Ans. The above reaction is an example of displacement reaction, because in this reaction, Al displaces Fe from Fe₂O₃.

Q. What happens when dilute HCl acid is added to iron filings? Tick correct answer.

- (A) Hydrogen gas and iron chloride are produced.
- (B) Chlorine gas and iron hydroxide are produced.
- (C) No reaction takes place.
- (D) Iron salt and water are produced.

Ans. Option (A) is correct - hydrogen gas and iron chloride are formed.

