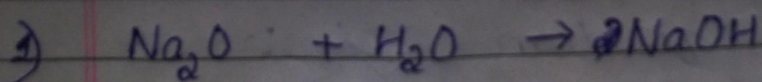
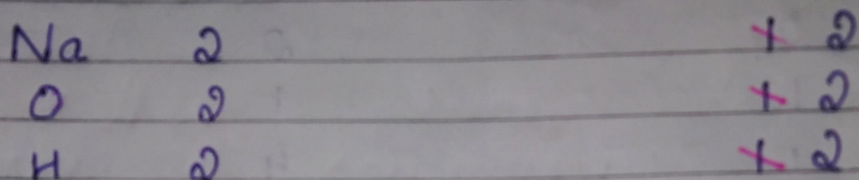
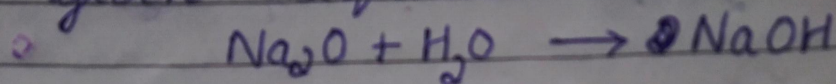


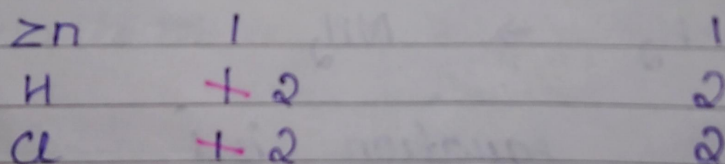
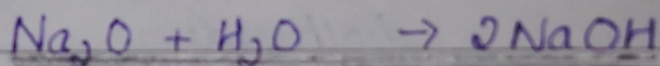
HOMEWORK



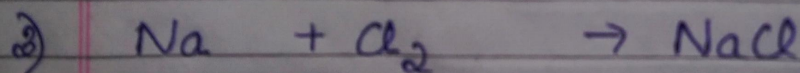
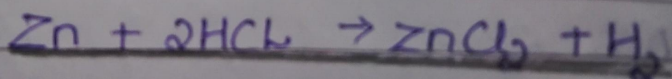
given equation is :



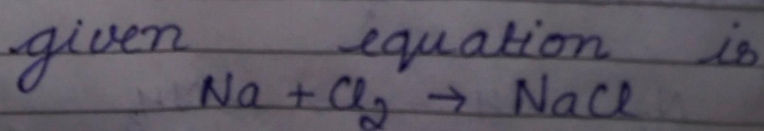
Balanced equation is :



balanced equation is,



given equation is



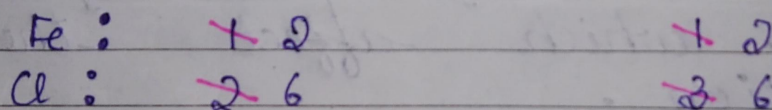
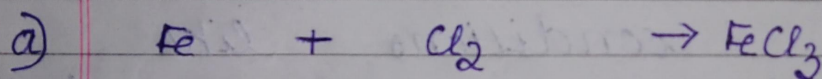
Balanced chemical equation
is $\rightarrow 2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$

Question

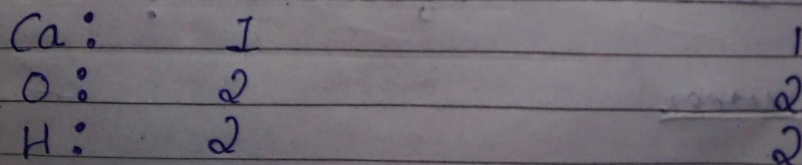
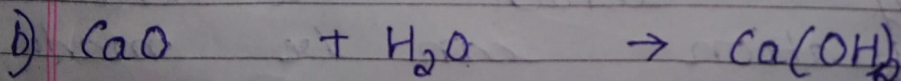
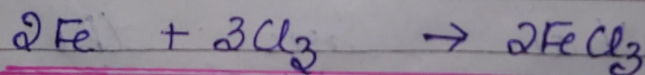
Write a balanced chemical equation for the following word equations:

a) Iron + Chlorine = Iron III chloride

b) Calcium oxide + water \rightarrow Calcium hydroxide



Balanced chemical equation
is,



Above equation is a
balanced chemical equation.

LIMITATIONS OF A CHEMICAL EQUATION

It does not inform about

- Physical state of the reactants and products.
- The time taken for the completion + of the reaction.
- The rate of the reaction.
- The conditions like temperature, pressure, catalyst etc. which affect the reaction.

Question:

What are the ways by which a chemical equation can be made more informative?

Answer

- * The physical state of reactants and products can be indicated by putting (s) for solid

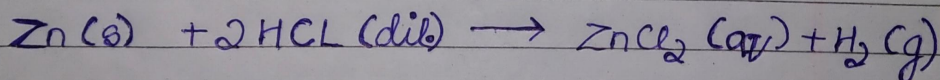
(l) for liquid, (g) for and
(aq) for aqueous state.

* Temperature, pressure and catalyst can be indicated above the arrow of the chemical reaction

* Evolution or absorption of heat, can be denoted by adding the heat term.

Question

What information do you get from the following chemical equation:



Answer

Solid form of Zn reacts with 2 molecules of dilute hydrochloric acid to form aqueous form of zinc chloride and hydrogen gas.