eg $CaO_{(s)} + H_2O_{(l)} \longrightarrow Ca(OH)_{2\ (aq)}$

Calcium oxide (Quick lime) — Water (slaked lime) — Calcium hydroxide

– $Ca(OH)_2$ slaked lime is used for white washing walls. It reacts will CO_2 to form $CaCO_3$ and gives a shiny finish to the walls.

$Ca(OH)_{2(aq)} + CO_{2(g)} \longrightarrow CaCO_{3(s)} + H_2O\ (l)$

Calcium hydroxide — Calcium Carbonate

– Burning of Coal

$C_{(s)} + O_{2(g)} \longrightarrow CO_{2(g)} + \text{heat} + \text{light}$

– Formation of water

$2H_{2(g)} + O_{2(g)} \longrightarrow 2H_2O(l)$

Exothermic Reactions :- Reaction in which heat is released along with the formation of products.

eg. $CH_{4(g)} + 2O_{2(g)} \longrightarrow CO_{2(g)} + 2H_2O_{(g)}$

– Respiration is also exothermic reaction.

– De composition of vegetable matter into compost.

De compositon Reactions :– The reaction in which a single substance decomposes to give two or more substances. De composition reactions can be of three types

Thermal Decompositon :– When a decompositon reaction is carried out by heating