

Cambridge IGCSE Chemistry

Topic 13: Carbonates

Notes





Describe the manufacture of lime (calcium oxide) from calcium carbonate (limestone) in terms of thermal decomposition

- Calcium carbonate $\xrightarrow{\text{heat}}$ calcium oxide + carbon dioxide
 - $\text{CaCO}_3 \xrightarrow{\text{heat}} \text{CaO} + \text{CO}_2$
- SAME AS: Limestone $\xrightarrow{\text{heat}}$ lime + CO_2

Name some uses of lime and slaked lime such as...

- Treating acidic soil
- Neutralising acidic industrial waste products, e.g. flue gas desulfurisation

Name the uses of calcium carbonate in the manufacture of iron and cement

- Iron :
 - Calcium carbonate helps to remove acidic impurities from the iron by reacting with them to form molten slag
- Cement :
 - Heat powdered limestone with clay
 - It is an ingredient in mortar and concrete (other building materials)

