

Section 1.2: Limestone and Building Materials

Limestone and Other Carbonates

- That limestone is mostly calcium carbonate (CaCO_3) and is quarried from the ground.
- That thermal decomposition of calcium carbonate produces calcium oxide and carbon dioxide.
- That magnesium, copper, zinc and sodium carbonates thermally decompose to produce a metal oxide and carbon dioxide.
- That some Group 1 carbonates can't be decomposed in the school lab by a Bunsen burner.
- How to write word equations for the thermal decomposition of metal carbonates.
- That the reaction of calcium carbonate with acid produces a calcium salt, carbon dioxide and water.
- That limestone is damaged by acid rain.
- That magnesium, copper, zinc and sodium carbonates react with acids to produce a metal salt, carbon dioxide and water.
- How to write word equations for the reactions of metal carbonates with acids.
- That when calcium oxide reacts with water, calcium hydroxide is formed.
- That calcium hydroxide can be used to neutralise acidic soil.
- How calcium hydroxide in solution (limewater) can be used to test for carbon dioxide.

Using Limestone

- How cement, mortar and concrete are made from limestone.
- The advantages and disadvantages of using limestone, cement and concrete as building materials.
- The benefits of quarrying for limestone.
- The problems associated with limestone quarrying and manufacturing limestone building materials.