

C1 - Limestone Quiz

What is the formula for limestone?

What is produced when limestone is heated strongly?

What are the chemical and everyday names of CaO and Ca(OH)_{2(s)} and Ca(OH)_{2(aq)}?

What type of reaction is $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$?

What is limestone used for?

Limestone is thermally decomposed inside a rotary kiln. Explain why large amounts of CO₂ are produced in this process.

One of the waste gases leaving the limekiln is nitrogen. Where does this gas come from?

Not all metal carbonates decompose when heated with a Bunsen flame. Give a reason for this.

How do you test for carbon dioxide?

What is produced when metal carbonates such as calcium carbonate react with acids?

Write equations for the limestone cycle

When green copper carbonate is heated, a gas is given off and a black solid is formed. Identify the black solid.

How can you use limewater to find how long it takes for a metal carbonate to decompose?

Buildings made from limestone are affected by burning fossil fuels containing sulfur Explain why.

Calcium carbonate reacts with sulphuric acid. Use the equation to explain why the reaction stops quickly: $\text{CaCO}_{3(s)} + \text{H}_2\text{SO}_{4(aq)} \rightarrow \text{CaSO}_{4(s)} + \text{H}_2\text{O(l)} + \text{CO}_{2(g)}$

Plaster is made by mixing slaked lime with water. Why does plaster become hard over time?

How do you produce mortar?

Why does mortar hold bricks together?

What are the disadvantages of mortar and cement?

How do you make cement?

How do you make concrete?

Why do builders use concrete rather than pure cement?

Give reasons for using concrete rather than limestone as a building material.

Give reasons against building with concrete.

Give reasons for mining limestone.

Give reasons against mining limestone.