

# CIE Chemistry IGCSE

## Topic 13 - Carbonates

### Flashcards



What is chemical name for lime?



What is chemical name for lime?

Calcium oxide (CaO)



What is chemical name of limestone?



What is chemical name of limestone?

Calcium carbonate ( $\text{CaCO}_3$ )



How can calcium oxide be manufactured from calcium carbonate?



How can calcium oxide be manufactured from calcium carbonate?

Calcium carbonate decomposes when heated to form calcium oxide and carbon dioxide.

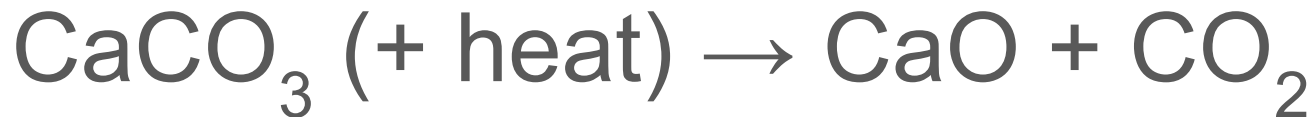


What is the chemical equation for the thermal decomposition of calcium carbonate?





What is the chemical equation for the thermal decomposition of calcium carbonate?



What are some of the uses of lime  
(calcium oxide)?



What are some of the uses of lime (calcium oxide)?

- Treating water
- Treating acidic soil
- Neutralising acidic waste products (e.g. flue gases)
- Making ceramics



# What is slaked lime?



What is slaked lime?

Calcium hydroxide -  $\text{Ca}(\text{OH})_2$



# How is slaked lime made?



# How is slaked lime made?

By adding water to calcium oxide



What are some of the uses of slaked lime?





# What are some of the uses of slaked lime?

Similar uses to lime:

- Treating water
- Treating acidic soil
- Neutralising acidic waste products (e.g. flue gases)
- Making ceramics



How is calcium carbonate used in the  
manufacture of iron?



How is calcium carbonate used in the manufacture of iron?

Calcium carbonate is used to remove acidic impurities from the iron. It reacts with the impurities to form molten slag.



How is calcium carbonate used in the  
manufacture of cement?



How is calcium carbonate used in the manufacture of cement?

Powdered calcium carbonate is heated with clay to form cement.

