

CAIE Chemistry IGCSE

9.5 Corrosion of metals

Flashcards

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What type of reaction is rusting?



What type of reaction is rusting?

Rusting is an oxidation reaction



State the conditions required for the rusting of iron and steel



State the conditions required for the rusting of iron and steel

Iron and steel will rust when they come into contact with water and oxygen



Give examples of barrier methods to prevent rusting



Give examples of barrier methods to prevent rusting

- Oiling
- Painting
- Greasing
- Coating with a layer of plastic



How do barrier methods help to prevent rusting



How do barrier methods help to prevent rusting

Barrier methods prevent iron and steel from rusting by preventing the metals from becoming in contact with oxygen and water



How can zinc be used to prevent iron
from rusting?
(extended only)



How can zinc be used to prevent iron from rusting?
(extended only)

Iron can be galvanized with a thin layer of zinc to prevent rusting

Zinc acts as a barrier method and sacrificial protection



Explain why sacrificial protection is used
to prevent iron from rusting
(extended only)



Explain why sacrificial protection is used to prevent iron from rusting (extended only)

Sacrificial protection is when metals higher in the reactivity series, such as zinc, are used to coat metals lower in reactivity, such as iron.

This is because metals that are more reactive than iron will be more likely to get oxidised and lose electrons to form its positive ions.

