



- Describe what's meant by the word corrosion
- Describe the conditions required for rusting
- Describe how to prevent corrosion, including sacrificial protection



### Quickfire Question Round

What is corrosion?

What is needed for rusting to occur?

What is the equation for rusting?

What can happen to iron products as a result of corrosion?

List 4 ways in which rusting can be prevented.

What is meant by the term galvanised?

Which metal is more reactive – zinc or iron?

Name an alternative metal which could be used as sacrificial protection instead of zinc.

What happens in terms of electrons during oxidation?

Provide an example which shows how Thames Water prevent rusting.

### Interpreting data

Test tube	Mass of nail in grammes	Mass of nail after 7 days in grammes
1. Iron nail + water	8.5	8.95
2. Iron nail + dry air	8.45	8.45
3. Iron nail + boiled water + oil	8.51	8.51
4. Painted iron nail + scratch + water	9.4	9.52

Which nail most increased in mass?

Which nail/s did not increase in mass?

Explain why the nail in test tube 2 did not increase in mass

By how much did the nail in test tube 4 increase in mass?

Explain why the nail in test tube 4 did not increase in mass



## KS4-17-05: Using Resources - Explore rusting

- Describe what's meant by the word corrosion
- Describe the conditions required for rusting
- Describe how to prevent corrosion, including sacrificial protection



**Define the following terms using suitable examples:**

Corrosion:

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Rusting:

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Sacrificial Protection:

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**Describe how to prevent corrosion using the examples:**

Oxide coating on aluminium:

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Zinc on iron:

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Magnesium on steel:

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**Draw and label an example which explains how corrosion can be prevented using a sacrificial barrier.**