

Corrosion

Corrosion Procedure:

1. Sand 3 pieces of Zn
2. Obtain 3 test tubes.
3. In the first test tube put 10 mL of water and 10 mL of hydrochloric acid
4. In the 2nd test tube, put 10 mL of water, 10 mL of hydrochloric acid, and scoop of sodium chloride.
5. In the 3rd test tube, put 10 mL of water, 10 mL of hydrochloric acid, and scoop of sodium chloride.
6. Place a sanded piece of Zn in test tube 1 and 2
7. Wrap a piece of Mg around the 3rd piece of Zn, making sure the Mg is touching the Zn, and place in the 3rd test tube.
8. Place all three test tubes in a beaker of water and heat on the hot plate until the end of the block.
9. Make observation of the Zn pieces.

Questions: read pages 483 - 84 in your text.

1. What is corrosion? Write an equation for an example.

What is being oxidized? _____

What is being reduced? _____

2. What makes corrosion faster? Why?

3. Why is gold called a "noble metal"?

4. Explain why aluminum does not corrode all the way through, but iron does. What implications does this fact have for bridge structure?

5. Explain what coating a material does and give some examples.

6. What is meant by the term "sacrificial metal" and how does that prevent corrosion?

Conclusion: Use the above to explain your observations in the lab.