

Separate Science - Chemistry - Key
Stage 4

C10 Using Resources

Rusting

Miss Offer



Independent task - Recall questions

Answer the following questions:

1. What is corrosion?
2. What is needed for rusting to occur?
3. What is the equation for rusting?
4. What can happen to iron products as a result of corrosion?
5. In a rusting experiment, why would a test tube which has an iron nail, air and no water also contain calcium chloride?



Independent task - Recall questions

Answer the following questions:

1. List 4 ways in which rusting can be prevented
2. What is meant by galvanised?
3. Which metal is more reactive - zinc or iron?
4. Name an alternative metal which could be used as sacrificial protection instead of zinc
5. What happens in terms of electrons during oxidation?



Independent task - interpreting data

Test tube	Mass of nail in grams	Mass of nail after 7 days in grams
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

Answer the following questions :

1. Which nail most increased in mass?
2. Which nail/s didn't increase in mass?
3. Explain why the nail in test tube 2 didn't increase in mass
4. By how much did the nail in test tube 4 increase in mass?
5. Explain why the nail in test tube 3 didn't increase in mass

