Separate Science - Chemistry - Key Stage 4

C10 Using Resources

Rusting





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?

2

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?

3

Independent task - interpreting data

Test tube	Mass of nail in grams	Mass of nail after 7 days in grams	Answer the following questions:
1 - Iron nail + water	8.5	8.95	 Which nail most increased in mass? Which nail/s didn't increase in mass? Explain why the nail in test tube 2 didn't increase in mass By how much did the nail in test tube 4 increase in mass? Explain why the nail in test tube 4 didn't increase in mass
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	