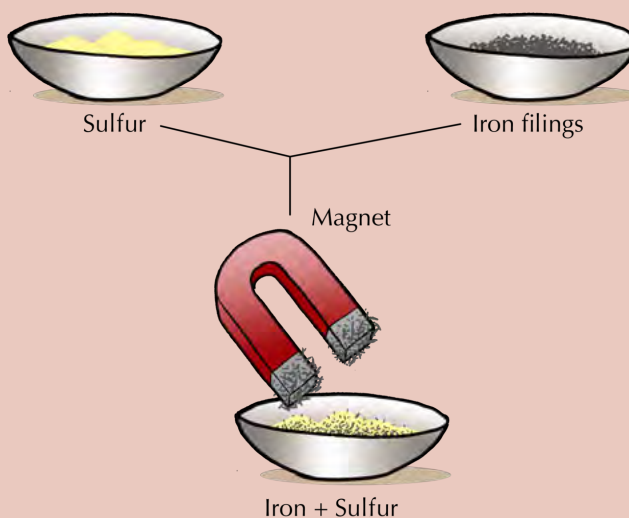


REVISION:

1. Two important words have been left out of the following paragraph. The missing words are **chemical** and **physical**. Rewrite the sentences and fill in the missing words in the paragraph by placing each one in the correct position:

The components in a mixture have not undergone any _____ changes. They still have the same properties they had before they were mixed. That is why mixtures can be separated using _____ methods. [1 mark]

2. In the diagram below, iron filings and sulfur have been mixed. Write a short paragraph (2 sentences) to explain how the mixture can be separated using magnetic separation. [2 marks]

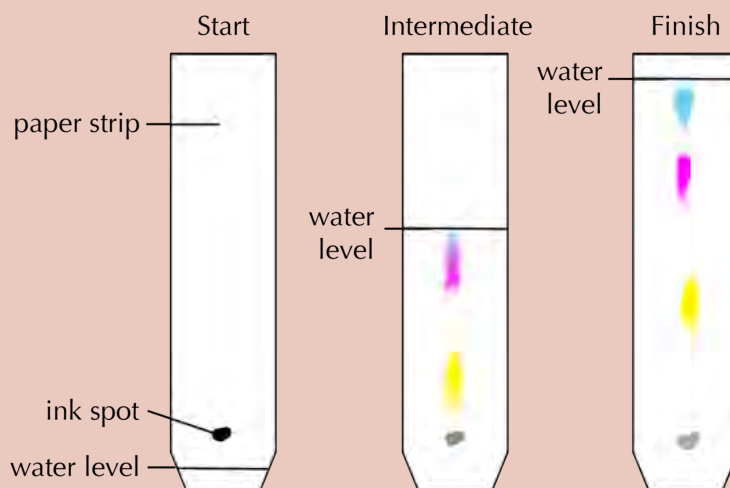


3. A vacuum cleaner creates a suspension of dust in air as it sucks up the dust on the floor. Clean air comes out of the vacuum cleaner. How does the vacuum cleaner separate the dust from the air? [2 marks]

4. Write a short paragraph (3 sentences) to explain how salt is produced from seawater. [3 marks]

5. Choose the correct word to complete the sentence from the following list: colours; boiling points, tastes. Write the word below. Suppose we want to separate two liquids using distillation as separation method. This will only be possible if the two liquids have different... [1 mark]

6. The diagram below shows a strip chromatogram that is being prepared from a spot of black ink. The strip on the left shows the chromatogram at the start of the experiment, the strip in the middle shows the chromatogram halfway through the experiment, and the strip on the right shows the chromatogram at the end of the experiment.



a) How many different pigments does the black ink consist of? Explain your answer. [1 mark]

b) Which pigment is moving the paper at the fastest speed? Arrange the pigments in order of increasing speed of movement. [2 marks]

7. The table below contains a list of mixtures. In the right hand column, next to each mixture, write the **best** method for separating the mixture into its components. [8 marks]

Mixture	Separation method
Salt and water	
Sand and iron filings	
Sand and water	
Colour pigments in ink	
Stones and sand	
Ethanol and water	
Oranges and apples	
Sugar and iron filings	

8. Name the 4 classes of materials that can be recycled. [4 marks]

9. Write a sentence to say how you would dispose of each of the following non-recyclable materials: vegetable peels; old running shoes; expired medicine. [3 marks]

TOTAL: 27 marks

