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Chemistry

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Separating Mixtures lab

Research Question:

How can I separate a mixture into its original parts?

Introduction:

An element is the most simple and pure of substances. While a compound is a chemical combination of two or more different elements. Mixtures, unlike elements or compounds, are not pure chemical substances.

Procedure:

First, we separated the iron from the mixture with a magnet. Then we picked out the rocks with tweezers and our fingers. Next, after some careful thought and planning, we decided to filter the sand and salt apart by adding water and pouring it through a coffee filter. After that, we boiled away the water so we only had the salt left.

Observations:

After the water had been evaporated the salt looked like a crust.

The iron felt like grainy hair and followed the magnet around like a tail.

Conclusion:

The iron was able to be separated with the magnet because of its properties as a metal. Since the rocks were large enough we were able to pick them out and determine if they were sand or not. The makeup of salt allows it to dissolve in water while sand cannot resulting in our ability to strain the sand from the water.