Experiment 2.1: Separating a Mixture of Salt and Chervil

Data:

What things looked like when I added water to a mixture of salt and chervil:

I couldn’t see the salt anymore, because it dissolved in the water to make saltwater. However, the leaves of chervil were floating around in the saltwater.

What things looked like when I filtered the water, salt, and chervil:

The beaker had a clear solution of saltwater. No chervil was present.

What was left behind on the filter paper:

The chervil was clinging to the filter paper.

What was left in the beaker after I boiled the filtered mixture:

After the water boiled away, there was just salt in the beaker. It was clinging to the glass of the beaker.
Summary:

In this experiment, I mixed salt with chervil. To separate them again, I added water to the mixture. This allowed the salt to dissolve in the water, but the chervil did not. I then filtered the resulting mixture. The chervil could not pass through the filter paper, but the saltwater could. As a result, the chervil remained clinging to the filter paper, and the beaker had a mixture of just salt and water in it. I boiled away all the water, and the salt was left behind. This shows that mixtures can be separated using only physical processes, such as filtering and boiling.