Student task: Purifying a brine

Your task is to purify a sample brine and obtain the pure substance sodium chloride. You only know that the brine is a mixture of sodium chloride, sand and stones in water.

In your group you have to develop an experiment to purify the brine. You will get a sample of the brine and a selection of equipment that you may use to conduct your experiment.



*Wear your eye protection!*

For your experiment, you are allowed to use the following equipment:

* Beakers
* Erlenmeyer flask
* Bunsen burner
* tripod
* wire gauze
* funnel
* filter paper
* …

If you think a different device would be useful, discuss your idea with the teacher!

Follow-up questions:

1. Explain the processes involved in the steps of your experiment on the molecular level.
2. Explain how you would separate the substances if different ionic compounds were involved.