

## Separation of Salt and Sand

### Concepts

#### **Explanation:**

This demonstration is based on the fact that salt dissolves in water and sand does not. Therefore you can add water to the salt/sand mixture and the salt will dissolve into the liquid and poured off. This leaves the sand behind. To recover the salt one simply needs to evaporate off the water and the salt will be deposited back onto the sides of the beaker. One mistake that students often make is that when you evaporate a mixture all parts of that mixture leave instead of only the components with a lower BP than the temperature you are at.

#### **Sources:**

*If you have other explanations, concepts, or ideas for this demonstration please share them by contacting our Chem Demo team ([bedell@nku.edu](mailto:bedell@nku.edu); [sieveb1@nku.edu](mailto:sieveb1@nku.edu)). We will pass them on to the community and credit you with the ideas.*