

Finding Solutions

Summary

Students will use the terms solute and solvent in describing a solution. They will sketch a solution at the particle level and design and conduct an experiment to determine the factors (e.g., agitation, particle size, temperature) affecting the relative rate of dissolution.

Main Core Tie

Science - Chemistry

[Standard 6 Objective 1](#)

Time Frame

1 class periods of 70 minutes each

Group Size

Small Groups

Materials

- [student sheet](#)
(attached)
- sodium thiosulfate
- scales
- water
- Erlenmeyer flasks
- stopwatches
- mortar and pestles
- heat sources
- stirring rods

Instructional Procedures

Show students the sodium thiosulfate and dissolve some in a flask of water. Ask students what factors they think might affect the rate at which it dissolves.

Ask students to work in lab groups to establish a control and develop three different procedures to dissolve an equal amount of the sodium thiosulfate in water. They need to clearly describe their procedures. Show them the materials you have provided for them to use. Explain that if they need something else, you will provide it, if possible.

Once students have written complete procedures, allow them to begin work in the lab.

Each student group should be prepared to report on their findings.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)