

Irene Hahn

Objective:

To help students understand the dissolving process at the molecular level.

Target student audience: YR.1, First year chemistry

ChemSense User Tools: INTERMEDIATE

ChemSense Tools used: ANIMATION
FEEDBACK-TEACHER

Specialized Tools needed: NA

Classroom Implementation

Time: 45 minutes

Student Grouping: pairs

Activity Type: Animating the dissolving process of an ionic solid in water.

Chemistry Concepts in Activity (linked to CA stds & ChemSense 5 themes):

AUHSD 9.C.2 –Knows how to describe the dissolving process at the molecular level by using the concept of random molecular motion

AUHSD 3.C.3 – Knows salt crystals, such as NaCl, are repeating patterns of positive and negative ions held together by electrostatic attraction

AUHSD 3.C.4 – Knows that atoms and molecules in liquids move in a random pattern relative to one another because the intermolecular forces are too weak to hold the atoms or molecules in a solid form.

ChemSense Aggregation

Pre-requisite Chemistry Concepts:

basic definitions of dissolving, solubility, crystal lattice, electrostatic attraction

ACTIVITY Summary:

Students will animate the dissolving process of sodium chloride in water

Sources: NA

Application:

An understanding of the ideas of the phases of matter and their molecular structures will enhance understanding in understanding many processes in the life sciences.