



Lesson Plan

Don't Pop the Bubble

Lesson Plan for *Bubbles* Grade 1

Objective

To help students define and understand how bonds form between water molecules.

Things Needed

- Bubbles book
- A large, clear space

Before the Activity

Clear space in a room for students to form a circle. Read *Bubbles* out loud to the students.

Activity

To start, review the terms *bond, molecule,* and *surface tension*.

- What is a bond? (Answer: a connection that makes two things stick together)
- What is a molecule? (Answer: one of the smallest bits that matter can be broken into)
- What is surface tension? (Answer: a force that causes the molecules at a liquid's surface to pull together and form a stretchy layer)

Explain that surface tension causes water molecules to stick together. When soap is added to water, the surface tension decreases. But it doesn't totally go away. The water molecules can stretch away from one another, and a bubble forms.

Ask students to imagine they are water molecules. First, have the students break into groups of about eight people. Members of each group should stand close together in a small circle. Each person should reach into the middle of the circle and grab hands with two other students. These handholds represent the bonds between molecules, so for the rest of the game, students must try to not let go.



When you say *go*, each group should attempt to untangle the crisscross of arms until group members form one large circle, like a bubble. Students might have to turn around, lift an arm over someone's head, or even step over another person's arm. But they should never let go of either hand they are holding. If they let go, their bubble "pops," and the group has to start over. If you want, try repeating the game as one big circle with everyone in the class.

Evaluation

Could students define the terms from the book? Could each group untangle its member's arms without "popping" the bubble?

Standards

This lesson plan may be used to address the Common Core State Standards' reading standards for informational texts, grade 1 (RI 1.3).

