

Lesson Plan: Let's Be Molecules!

Area: Physical Science

Age Group: Kindergarten-1st Grade

Supplies Needed:

- Large Space
- Overhead Projector
- Glass beaker
- Water
- Food Coloring

Introduction:

- What are molecules? Describe that molecules are everywhere and that they are very small, too small to see with your eye

Demonstration:

- Turn on overhead projector and place a beaker with water on top of the projector
- Ask students if they think the molecules are moving
- Add a couple drops of food coloring and watch what happens!
- Students should be able to see drops of food coloring moving around and swirling
- Connect this to what molecules are and tell students that the molecules are moving even though the water is not moving

Directions:

- Have the whole class stand up and explain that they are now going to "become" molecules. Explain that warm molecules move around a lot and they like to spread out away from each other. Ask students to do this by walking, bouncing, or dancing. The hotter the molecules are, the faster they move. Ask students to act like hot molecules.
- Next they are going to become cold molecules. Cold molecules like to huddle together and bounce slowly. The colder the molecules are slower they bounce, and when they freeze they bounce really slowly, but they don't stop moving. Ask students to act like frozen molecules.
- Now give students cues as to how they should act like. Yell out hot molecules, cold molecules, and warm molecules, and students should act accordingly. Start off changing cues slowly but then get faster, see if the class can respond right away.

Follow-Up:

- Brain pop movie!
- Ask them what they learned

Source: <http://www.canteach.ca/elementary/physical15.html>