

What is Air? *Air is a Gas!*



Target Grade Levels

Kindergarten - Fifth

Time

One hour

Materials

- 3 glass containers, such as jars
- solid object that will fit in the container
- water

Knowledge and Skills (TEKS)

- Science:
 - Make wise choices in the conservation of resources;
 - Describe ways technology influences human capacity to modify the environment;
 - Give examples of scientific discoveries and technological innovations that have shaped the world;
 - Compare ways living organisms depend on each other; and
 - Know that organisms need food, water, light, air, and habitat.
- Language Arts
 - Listen and talk about experiences;
 - Write to express, discover, record, develop, reflect on ideas, and problem solve; and
 - Make contributions to small or large group discussions.

Overview

Students will learn the differences between gas, solid, and liquid while viewing the teacher's experiment.

Background Information

We need to breathe air to live. If our air is not clean, it affects our health. Just because we cannot see pollution does not mean it is not in the air we breathe. Clean air actions all year help keep our air clean.

Procedure

1) Vocabulary

- | | |
|-----------|--------------|
| a) gas | d) air |
| b) solid | e) compress |
| c) liquid | f) molecules |

2) Activities

- Set the three glass containers on a desk, one containing the solid object, another containing some water and the third containing "nothing".
- Have students describe the relationship of these three states of matter. Possible answers include:
 - Solid has its own shape inside the jar.
 - Liquid takes the shape of the container but has one free surface.
 - Gas fills the entire container.
- They may be able to name some other properties. Ask students what they notice about these states of matter when they are compressed.
- How might we know if our air is not clean? Have students draw pictures of or list things they think make our air dirty.
- What are some simple actions students can take that can help clean the air?

Adapted from: "Ozone Action! Let's Clear the Air: Educational Activities Kindergarten-5th grade." West Michigan Clean Air Coalition. 2003. www.wmccac.org/gradesk5.pdf.