Project FOCUS Best Lessons KINDERGARTEN

Title of Lesson: Properties of Air

Theme: Physical Science

<u>Unit Number:</u> 3 <u>Unit Title:</u> Space, Time and Gravity

Performance Standard(s) Covered (enter codes):

SKCS5 SKP1

Enduring Standards (objectives of activity):

Habits of Mind

Asks questions

Uses numbers to quantify

Works in a group

☐ Uses tools to measure and view

Looks at how parts of things are needed

Describes and compares using physical attributes

◯ Observes using senses

☐ Draws and describes observations

Content (key terms and topics covered):

Properties of air, weight differences in objects

Learning Activity (Description in Steps)

Abstract (limit 100 characters): This lab teaches about the properties of air by making students think about the purpose of air.

Details: To demonstrate that air takes up space, I blew up a balloon to deflate to show the class that the air can escape and move out of the balloon even though you cannot see it. We then discussed the concept that air can move things and the fact that wind is air. We then moved into our group activity. The activity works best if students are in groups of four to five per table. Each table received the same variety of objects. I used things such as pencils, Starburst candy, paper clips, tissue paper, and building blocks. Each group was instructed to divide the objects into one of two categories: those that can easily be moved by air and those that cannot easily be moved by air. Once each group has finished sorting the objects, I called on students to show me one object and to tell me whether or not they think that object can easily be moved by air. After telling me his or her hypothesis, I asked the student to blow on the object and see if it would move. If the student was able to move the object, I moved his or her seat further from the object and had the student try again until the object was no longer moved by the student's breath.

After having a student demonstrate the ease or difficulty of moving each object with his/her breath, I brought out a hair dryer and told the class we were going to see a stronger force of air move the objects. The class observed as I used the hair dryer on a low setting to see if each object would move off an empty desk. The high level was used to move the objects that remained on the desk. Each of the items was moved by the high level.

Materials Needed (Type and Quantity):

Hair dryer or fan Collection of items of various weights and mobility Balloon

Notes and Tips (suggested changes, alternative methods, cautions):

Sources/References:

- 1)
- 2)
- 3)