

AIR (IN MOTION)

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Subject

Basic Science

Prepared By

[Instructor Name]

Grade Level

2

Overview

This lesson plan covers teaching content for;

1. Meaning of Wind.
2. Effects and importance of Wind.
3. Harmful effects of Air.

Teacher Guide

Day 1/Lesson 1- 15 Mins

1. Have your students draw a spiral shape on a piece of paper and cut it out.
2. Help them to poke a hole in the center of the spiral with a thumbtack.
3. Ask them to push one end of the thread into the hole, tie it and attach the other end to the center of the clothing hanger.
4. Ask them to hold the hanging spiral several inches above a heat source.
5. Ask your students to explain what they see. Did the spiral move?
6. Explain to them that when warm air moves upward, it pushed the bottom of the spiral and made it spin. This is the same motion that causes wind.
7. Warm air rises and air pressure under it reduces and cools air nearby to take its place.
8. Wind is the sideways moving of air and is the cause of changing weather patterns.

Guided Practice

Day 2 Lesson 2- 15 mins

1. Explain that you can use a milk jug (or any alternative) to blow out a candle, using just a few special modifications.
2. Start by helping your students cut the bottom off the jug. Then cut a circle from the strong plastic bag, at least three inches bigger around than the opening of the jug.
3. Use the plastic to replace the bottom of the jug, and tape it firmly with the duct tape all around, so that no air can escape.
4. Now the fun part: Place the lighted candle in a holder on a table, and hold the jug at least a foot away, with the mouth of the jug pointed toward the candle.
5. Holding the jug steady, hit the plastic firmly with an open hand.
6. Tell them to watch, the candle should blow out, even though you never touched it or blew on it yourself. Why?
7. The jug is full of air. When you banged on the bottom, you shot an air current straight out the jug.

Objectives

Students will be able to:

1. Define Wind.
2. Describe the effects of Wind.
3. Tell the importance of wind.
4. Identify what causes the wind to blow and how it can change intensity.

Information/Instruction

1. Explain to your students that you will be exploring whether air really exists, even if you can't see it.
2. Explain that one way we can identify air is by seeing what it can do—
3. like when you use it to blow out a candle.

Materials Required

- Paper
- Milk or any alternative
- Duct tape
- Candle
- Plastic bags
- Rubber bands
- Cloth hanger
- Thread
- Scissors
- Plastic jar or bucket
- Water
- Glass cup

Additional Resources

- <http://www.myfreshplans.com/2011/0/lesson-plans/>
- <https://betterlesson.com/lesson/63283-is-wind>
- <https://www.teachervision.com/all-kind-weather>
- <https://study.com/academy/lesson/wind-lesson-for-kids-facts-causes.html>
- <https://www.scholastic.com/teachers/lesson-plans/teaching-content/when-wind-blow-lesson-plan/>

Teacher Guide

Day 3 Lesson 3- 15 mins

1. Place a plastic jar or bucket on a table so that everyone will be able to stand around the table and see and reach the container.
2. Test plastic bags for holes by filling them with water. (Have extra bags handy as the bags may develop holes as you do the activity.)
3. Put air into a plastic bag by blowing into it or waving it through the air.
4. Clamp the opening of the bag around the mouth of the container and fasten it tightly by either wrapping string around it two or three times or by putting a rubber band around it.
5. Say to students, "Now I will try to push the bag into the container. What do you think will happen?"
6. After the class has made some predictions, give everyone a chance to try to push the bag into the container.
7. Ask the students to describe what they feel as they push down on the bag.
8. Remove the bag and place it inside the container, like a liner. Drape the top of the bag over the lip of the container, just like the lining in a trash can. Tie string tightly around it two or three times or fasten it tightly with a rubber band.
9. Say to students, "Now I will try to pull the bag up out of the container. What do you think will happen?" What happens? Can the students explain what happened?

1.

Guided Practice

Day 4/Lesson 4- 15 Mins

1. Stuff a Paper Towel in a Glass so that it won't fall out when you turn it upside down.
2. Have your students scrunch and stuff the paper towel.
3. Fill a bowl with water using a small pitcher to get your students more involved (plus pouring is a great fine motor activity).
4. You may drop some liquid watercolor into the water to make it clear to the eye when the air escapes and the water enters the cup.
5. Turn the glass upside down, put it in the water. Air takes up space, so the water does not come into the glass.
6. Tip the glass a bit and water enter the glass and absorbs into the paper towel.

	Teacher Guide	Guided Practice
Assessment Activity	Assessment Activity	
<p>1.To assess the students' knowledge, give them each a piece of paper with two columns, one labeled "What I Learned About Air" and the second "Questions I Have About Air or What I Would Like to Learn More About Air".</p>		
Summary		