AIR

Grade Level: Pre-Kindergarten (suitable for 4 to 5 year olds)
Presented By: Kathleen Conezio, Omeri Nwachi, Lucia French, Third Church Head Start Demonstration Center, Rochester, NY
Length of Unit: 2 to 4 weeks

I. ABSTRACT

This unit will explore how we know that air exists by considering its effects in the physical world. Even though we can't see air, we can observe and feel its presence. Air moves things and fills things. Wind is a daily example of air's presence in the physical world. We can identify and classify objects that are affected by air. Concepts of air will form the hub of an integrated curriculum that includes language arts (vocabulary growth, literature, opportunities to develop expressive and receptive language), outdoor play, center-based play, arts and expression, mathematics, and social studies. The developmentally appropriate curriculum balances teacher-guided and child-initiated hands-on exploration of the physical environment. Rubrics allow teachers to assess the effectiveness of their lessons and to adjust them accordingly; an interactive narrative offers authentic assessment of children's learning of the unit content.

II. OVERVIEW

A. Scientific Reasoning and the Physical World

B. Air exists; a systematic approach allows children to detect air's presence through the ways it moves and fills things.

C. Taking a systematic approach to understanding the physical world

1. Observe and Explore
2. Reflect on Prior Knowledge
3. Pose Questions
4. Plan and Predict
5. Act and Observe
6. Report and Reflect

III. BACKGROUND INFORMATION FOR TEACHERS

Flying and Floating, David Glover
Fun with Science: Air, Brenda Walpole
Everything You need to Know about Science Homework, Anne Zeman and Kate Kelly

IV. RESOURCES

A. Books for shared reading

Harvey Potter's Balloon Farm, Jerdine Nolan, Mark Buehner
Mirandy and Brother Wind, Pat McKissack
Gilberto and the Wind, Marie Hall Ets
Flying, Gail Gibbons
Air is All Around You, Franklyn M. Branley
The Wind Garden by Angela McAllister
The Cloud Book, Tomie De Paulo
Air, Allan Fowler

Adaptation of Air Unit for Core Knowledge Foundation Presentation
University of Rochester's Preschool Curriculum for the 21st Century
Third Church Head Start, 4 Meigs Street, Rochester NY 14607

How Does the Wind Walk? Nancy White Carlstrom
The True Story of the Three Little Pigs by A. Wolf, Jon Scieszka
Piggie Pie, Margie Palatini
The Three Little Wolves and the Big Bad Pig, Eugene Trivizas
How Far is Far? Alvin R. Tresselt
Planes, Anne F. Rockwell
The Fourth Little Pig, Teresa Clesi
The Three Little Pigs
Whistle for Willie, Ezra Jack Keats
The Wind Blew, Pat Hutchins
On Sunday the Wind Came, Alan Elliot
Sky Dragon, Ron Wegen
When the Wind Stops, Charlotte Zolotow
Hop Jump, Ellen Stoll Walsh
Benjamin's Balloon, Alan Baker
Mine's the Best, Newell Crosby Bonsall
Bubble Bubble, Mercer Mayer
Bubble Gum in the Sky, Louise Everett
Benny's Big Bubble, Jane O'Connor
The Bubble Factory With Bubbles, Tomie De Paulo
Apples, Bubbles, Crystals, Science ABC's, Andrea T. Bennett
Mooncake, Frank Asch
That's Good, That's Bad, Margery Cuyler
The Grumpalump, Sarah Hayes
The Big Balloon Race, Eleanor Coerr
Drylongso, Virginia Hamilton
The Fish from Japan, Elizabeth Cooper
Kite Flier, Dennis Haseley
The Kite, Mary Packard
The Ultimate Kite Book, Paul Morgan
A Kite for Bennie, Genvieve Gray
Moon Dragon, Moira Miller
Nu Dang and his Kite, Jacqueline Ayer
Curious George Flies a Kite, Margaret Rey
Feel the Wind, Arthur Dorros
A Letter to Amy, Ezra Jack Keats
Who took the Farmer's Hat? Joan M. Lexau

B. Videos for Classroom Viewing
Hot Air Henry, (Reading Rainbow #16
Bored - Nothing to Do, Reading Rainbow # 64

V. LESSONS

The first three lessons are designed to allow children the opportunity to explore the properties of air in a relatively open-ended manner with support from the teacher. This is a good time to explore extensively

the literature on air through reading aloud and for children to learn the vocabulary used to talk about air. After "exploring air," the teacher can help the children to organize what they have learned so far and what questions they have about air. This discussion sets the stage for the next three lessons designed to allow children to explore the properties of air in a more deliberate and systematic manner. The culminating activity is designed as a large scale project that involves several days of planning and preparation, as well as a day of celebration, perhaps with invited guests (e.g., parents). During this period, children are using and extending what they have learned about air, as well as developing and practicing skills for planning and executing a complex project. Children can participate in many ways, including creating displays, preparing materials, sorting and counting items, and rehearsing entertainment. A sense of excitement will be generated as child and adult participants demonstrate and celebrate what they have learned about air.

A. Lesson 1: Exploring Air: Fans

1. Objectives
   a. Lesson: We can move things with air.
   b. Children will:
      Reflect and Ask how they can make the objects move.
      Plan and Predict which of the objects will move if they blow air at them.
      Act and Observe the movement of the objects.
      Report and Reflect back to the group which objects moved and speculate on why.
2. Materials: electric fan or blow dryer, collection of items, fan shapes, craft sticks, stapler, crayons
3. Key Vocabulary
   blow, fan, electric, hairdryer, cool, wind, windy
4. Procedures/Activities
   a. Access and establish relevant knowledge through reading aloud and discussion; *How Does the Wind Walk*, Nancy White Carlstrom, *A Letter to Amy*, Ezra Jack Keats, *The Wind Blew*, Pat Hutchins
   b. Large Group Presentation/Co-Exploration of Activity
      Provide a selection of small items to children and encourage them to predict which items they can and cannot move by blowing on them. Use these predictions to create two piles and label them. Have the children blow on the items to test whether they move, and if so, how far back the child can stand and still move them by blowing. Decorate a paper fan and attach it to a craft stick. Try to move the objects again with the paper fans. Was it more difficult or easier? Place the objects in front of an electric fan or hair-dryer. Have an adult turn on the fan after the children predict what items will move now and why. Decide how to report the results of the activity (for example, in words, using a chart, or with a drawing).
      Discovery questions: During large and small group discussions, explore these questions with the children:
      - What will happen to the things when you blow on them?
      - What will happen to the light things?
      - What do you see happening?

- Did you touch the things to move them? Did the blow dryer? What did touch them?

5. Choice Time - Small Group Activities

Fan activity is available as a small group activity with teacher support. Teacher may also organize an enactment of "The Three Little Pigs."

Activity Centers have materials relevant to lesson concept and skills; these stay relatively constant throughout the week, so children can explore all areas or repeat favorite activities. For example, there might be fans and a hairdryer in the housekeeping area, pumps at the water table, an opportunity to make paper fans or blow paint across paper with a straw in the art area, a table activity involving sorting small objects into those that can/cannot be moved by blowing through a straw.

6. Large Group Wrap-up, Review, and Reporting

This may include discussion during lunch, co-authoring a newsletter describing concept/activities to parents, reading aloud, talking about windy weather, planning for tomorrow's activities, hanging the artwork as a report, a small group of children putting on a puppet show of "The Three Little Pigs" for the class.

7. Integrated Curriculum and Extensions

Mathematics: Explore concept of weight, sorting objects according to what the wind would and would not move.

Social studies: Discuss windy weather. How does it affect people? How do we dress for windy weather?

Expressive and Receptive Language: Learn vocabulary for talking about air, how air feels on our skin, what air can do in the physical environment.

B. Lesson 2: Exploring Air: Blow the Man Down

1. Objectives:
   a. Air can move some objects.
   b. Air is in our lungs.
   c. Wind is air.
2. Children will:
   a. *Reflect and Ask* how breathing and air are related; decide how to use their breath like wind.
   b. *Plan and Predict* how they can move the can.
   c. *Act and Observe* how the can is moved.
   d. *Report and Reflect* on their predictions, their observations, and their findings. Explain why the can moved and did not move under certain conditions.
3. Materials: small tin cans, straws, balloons, rubber bands, paperback book, plastic bag
4. Key Vocabulary: wind, lungs, blow, whistle.
5. Procedures/Activities

a. Access and establish relevant knowledge through reading aloud and discussion; *The Three Little Pigs* (and variations, see resource list), *Sky Dragon*, Ron Wegen

b. Large Group Presentation/Co-Exploration of Activity

(1) Place an empty can on a tabletop.

(2) Try to blow the can over.

(3) Try different methods for blowing the can over.
(4) Attach a balloon to the end of a straw with a rubber band.
(5) Place the can on the balloon.
(6) Blow into the straw and inflate the balloon.

Discovery Questions: (Discussed during large or small group or individually)

- What happened when you blew up the balloon?
- What was inside the balloon?
- Why didn't it work when you just blew on the can?
- Why did it work when you put the balloon under the can and blew it up?

c. Choice time - Small Group Activities
(1) "Blow the Man Down" activity is available as a small group activity with teacher support
(2) Activity Centers have materials relevant to lesson concept and skills; except for minor variations, these materials stay constant throughout the week.

d. Large Group Wrap-up, Review, and Reporting: Format is similar to Lesson 1, with content varying as appropriate.

e. Integrated Curriculum and Extensions

Mathematics: Continue exploration of weight, using a balance scale to compare the weights of objects that did and didn't blow over with the straw. Sort by weight.
Social studies: Discuss stormy weather and its effects.
Expressive Language: Use puppets to express huffing and puffing and recite "not by the hair on my chinny-chin-chin"
Receptive Language: Be an attentive audience for a puppet show.

C. Lesson 3: Exploring Air: Sounds of Air

1. Objectives:
a. Air is real.
b. Air makes a sound.
c. We can hear air moving with our ears

2. Children Will:
a. *Reflect and Ask* how air is used to create sounds
b. *Plan and Predict* what sounds they can make using air.
c. *Act and Observe* creating and listening to the sounds made by moving air.
d. *Report and Reflect* playing their sounds for each other and asking how to create new sounds.

3. Materials: a variety of commercially made wind chimes, an electric fan, assorted small objects such as shells with holes in them, juice can lids, nails, washers, string or yarn to suspend the objects, wooden sticks or dowels, tuning fork, tape player to record the sounds of air moving leaves, over water, and stormy weather.

4. Key Vocabulary: sound, vibration, buzz, hum, whistle, chime, tinkle

5. Procedures/Activities
a. Access and establish relevant knowledge through reading aloud and discussion: *Whistle for Willie*, Ezra Jack Keats, *Drylongso*, Virginia Hamilton
b. Large Group Presentation/Co-Exploration of Activity

(1) Hang up a variety of wind chimes around the classroom several days in advance so that the children may become familiar with them.
(2) During group time, ask children what they noticed about the wind chimes. How do they make sounds? What are the sounds like?
(3) When the children suggest that air causes the movement and sounds, ask if the sounds can be made louder or softer. Have the children try to change the sounds of the wind chimes.
(4) Ask the children what they think would happen if the chimes were outside - what would create the sounds there? If the weather permits, try this.

Discovery Questions:

How does air create sound?
How can you make the sound change?
Can you feel the air when it moves the wind chimes?

6. Choice time - Small Group Activities

"Sounds of Air" activity is available as a small group activity with teacher support. Plan with the children what materials they could use and how they would create their own wind chimes.

Select an object and attach it to a stick with yarn.
Repeat with other objects so that when the wind chime is complete, the objects will make noise.

Activity Centers have materials relevant to lesson concept and skills; these materials stay relatively constant throughout the week.

7. Large Group Wrap-up, Review, and Reporting:

Format is similar to Lesson 1, with content varying as appropriate.

8. Integrated Curriculum and Extensions

Mathematics: Using graduated levels of water in bottles (seriation), blow across the bottle openings; compare the sounds.
Social studies/Art and Expression

List: People who use air to make music
Explore: What instruments use air?
Experiment: With wind instruments (recorders, flutes or party horns).
Invite: A musician to visit the class.
Expressive Language: Respond to sounds with words "loud" and "soft."
Receptive Language: Wear blindfold and listen to wind chimes; locate/identify which wind chime partner has moved.

D. Lesson 4: Experimenting with Air: Straws, Water, and Bubbles

1. Objectives: A bubble is air trapped in a liquid; bubbles rise in water.
   a. Children will:
   (1) *Reflect and Ask* regarding prior knowledge of bubbles in liquids such as soda pop.
   (2) *Plan and Predict* how to make bubbles in water.
   (3) *Act and Observe* the direction that bubbles move.

(4) *Report and Reflect* retell what happened when is air trapped within the bubble.

2. Materials: large glass jar filled with water for demonstration, drinking straws, water table filled with water or individual cups of water, aquarium pump and hose
3. Key Vocabulary: bubble(s), pop, gum, straw, aquarium, pump, hose, rise
3. Procedures/Activities
   a. Access and establish relevant knowledge through reading aloud and discussion; *Bubble Bubble*, Mercer Mayer, *Bubble Gum in the Sky*, Louise Everett
   b. Large Group Presentation/Co-Exploration of Activity

      Discuss prior experience with bubbles, including drinking soda. Shake a bottle of soda and watch the bubbles rise. Ask the children what they predict will happen if air is blown out through a straw into a large glass jar filled with water. Have the aquarium pump set up and ready to go. Turn on the pump when the children have had a chance to discuss what they think will happen and why. This activity can be varied and explored for an additional day, by adding (various amounts of) liquid soap to the water.
   c. Choice time - Small Group Activities

      "Blowing Bubbles' is available as a small group activity with teacher support. Take a clean drinking straw. Place one end of it in the water (water table or individual glass) and blow. Try blowing harder and watch what happens. Try blowing softly.

      Questions for discussion during small group bubble blowing activity:
      What kinds of things happened when you blew air into water?
      Did the bubbles go up or down?
      Why do you think they always came to the surface?
      Can you think of a way to make the bubbles sink?
      Can you make big bubbles, small bubbles?

      Activity Centers have materials relevant to lesson concept and skills; these materials stay relatively constant for a week. The book corner has a selection of books about air, the housekeeping area has materials needed to play "airport," and "packing" (with small boxes, bubble wrap and styrofoam), the water table has materials for making bubbles, the art area has materials for making pinwheels, for illustrating one or more books. This would be a good day to have a bubble painting available in the art area.
4. Large Group Wrap-up, Review, and Reporting

   Format is similar to Lesson 1, with content varying as appropriate.
5. Integrated Curriculum and Extensions

   Mathematics: Compare: Bubble sizes.
   Count: Bubbles.

Social studies: Discuss where we find bubbles in our world.
Expressive Language: Tell someone how to blow a bubble.
Receptive Language: Follow directions on how to make a bubble painting.

E. Lesson 5: Experimenting with Air: Air on the Move

1. Objectives: Air will cause some objects to move in different ways. Airplanes, parachutes, pinwheels, and helicopters are some things that air can move.
   a. Children will
      (1) *Reflect and Ask* ways they have seen objects move with air and how they have seen air affect movement.
      (2) *Plan and Predict* how objects will move and which object will spin faster, fall slower, fly farther.
      (3) *Act and Observe* distances and types of movement.
      (4) *Report and Reflect* with a picture graph which object spun fell or flew and then design a new type of flyer or spinner.

3. Materials:

For parachutes:
fabric cut into 12" squares
String
Small unbreakable objects to suspend at bottom,
Such as spool, washer, or pine cone

For airplane:
paper to fold, possibly of different weights

For pinwheel:
4" squares of paper
Pencils with erasers or drinking straws
Thumbtacks

For helicopter:
10"x2" pieces of paper
Paper clips
Balsam Glider

4. Key Vocabulary: float, spin, airplane, parachute, helicopter, pinwheel, air, glide(r)s
5. Procedures/Activities:
   a. Access and establish relevant knowledge through reading aloud and discussion;
   Gilberto and the Wind, Marie Hall Ets, *Flying*, Gail Gibbons
   b. Large Group Presentation/Co-Exploration of Activity

Make a sample of each object and use them as part of the large group discussion about the effects of air. During choice time, children can choose which one they want to make.
Throw the object that you are going to tie to the parachute up in the air. Have the children talk about how it falls. Attach the object to the parachute. Have the children predict what will happen when it is thrown into the air. Throw it and discuss the results. Similar procedures can be followed using the paper airplanes and the paper helicopters.

Have a commercially made pinwheel available for the children to observe. Ask them to try blowing it to see the results. If the weather permits, use it outside. Ask the children what makes the pinwheel move and predict/explore what will make it move faster or slower.

Discovery Questions: explore the following topics in discussion during small group time and during the Wrap-up period.

We used a lot of homemade objects to play with air today. How are these objects used in our every day life?
What kinds of different ways did the air make these things move?
How did changing the speed of the air effect the movement?
What kinds of animals use air to help them move?

c. Choice time - Small Group Activities

Parachutes, helicopters, and airplanes are made, used, and talked about as a small group activity with teacher support.
Activity Centers have materials relevant to lesson concept and skills; these materials stay relatively constant throughout the week.

d. Large Group Wrap-up, Review, and Reporting

Format is similar to Lesson 1, with content varying as appropriate. For this lesson, the children might create a chart showing the distance each child could throw an airplane.

5. Integrated Curriculum and Extensions

Mathematics: Measure: How far?
Social studies: Discuss careers at the airport.
Expressive Language: Dictate "If I could Fly" to an adult.
Receptive Language: Follow directions to make a paper airplane.

F. Lesson 6: Experimenting with Air: Jumping on Air

1. Objectives: Air has volume
   Air takes up space
   a. Children will:
      Reflect and Ask about ways to trap air.
      Plan and Predict how to fill a bag with air, what will happen if we sit on air.
      Act and Observe what happens to a bag of air when we sit on it.
      Report and Reflect which bag works best to hold the air and person sitting on bag.
2. Materials: plastic produce bags from the grocery store, plastic twist ties to fasten bags closed, large clear garbage bags
3. Key Vocabulary: volume, space, burst, pop, plastic, jump
4. Procedures/Activities
   a. Access and establish relevant knowledge through reading aloud and discussion; *Hop Jump*, Ellen Stoll Walsh, *Mine is the best*, Newell Crosby Bonsall
   b. Large Group Presentation/Co-Exploration of Activity
      Open a produce bag and swing it through the air to fill it with air.

Fill the bag with as much air as possible and fasten it closed with a twist tie.
Sit on the closed bag and see what happens.
Use a small electric fan or a vacuum cleaner to fill the garbage bags with air.
Work with a partner and bunch several filled bags together.
Try to sit on the group of bags.

Discovery Questions: explore the following topics in discussion during small group time and during the Wrap-up period.

What was inside the bags?
How was this like blowing bubbles? How was it different?
How might you make an even stronger bag?
Do things have to be heavy to be strong?

c. Choice time - Small Group Activities

Balloons are filled and released during small group time with teacher support. Bubble wrap is available and the children/teacher talk about how the air protects things packed in the bubble wrap. Children try to pop the bubble wrap using a variety of different instruments.
Activity Centers have materials relevant to lesson concept and skills; these materials stay relatively constant throughout the week.

d. Large Group Wrap-up, Review, and Reporting

Format is similar to Lesson 1, with content varying as appropriate.

5. Integrated Curriculum and Extensions

Mathematics: Discuss "more and less" with respect to the sharpness of instruments used to try to pop bubble wrap.
Social studies: Discuss safety with bags and balloons, airbags in automobiles.
Expressive Language: Learn and sing "Pop goes the weasel"
Extension: If resources permit, buy an inflatable chair or some air mattresses for the reading corner and inflate them; talk about why jumping on them would be a bad idea.

VI: CULMINATING PROJECT: Enjoying Windy Weather

The purposes of the culminating project are to reinforce learning about air, to celebrate this learning, and to give children experience in planning and carrying out a multifaceted, complex project over several days. We have developed several culminating projects for our unit on air, one on windy weather, one on kites (with a field trip to fly kites), and one on innertubes and swimming (with a field trip for swimming). Any culminating project such as this will vary from year to year depending on the children's interests and the resources available.

For "Enjoying Windy Weather," we would invite parents to an outdoor picnic, and the children would begin planning the picnic at least a week ahead of time. They would read books such as Angela McAlister's *The Wind Garden* and Juan M. Lexau's *Who Took the Farmer's Hat?* They would prepare the things needed to "plant" a wind garden the day of the picnic, including flags, windsocks, wind chimes, and streamers. They would prepare one or more plays to entertain the parents, including perhaps enactments of *The Three Little Pigs* and *Who Took the Farmer's Hat?* They would work with the teachers to co-author an invitation to their parents. They would also work with the teachers to co-author a report on what they had learned about air. A large version of this report could be posted on the classroom wall, and

a small version could be laminated and given to parents at the picnic. They would plan some demonstrations for the parents, including perhaps, how to use fans to sail boats across the water table (or a pail of water), and how to do bubble painting. They would make plans for what to do if it rained on the day of the picnic and what to do if it was sunny but there was no wind. Each child would be caught up in the excitement of the culminating event, and would find a niche within which she/he could contribute while practicing a variety of emerging skills in the areas of planning, predicting, language, and learning about the surrounding world.

VII. ASSESSMENT

A. Rubric for Assessing Lesson Effectiveness

Air					
	Level A	Level 4	Level 3	Level 2	Level 1
General Classroom Style	No basis for evaluation.	Actively contributes to classroom activities.	Participates in classroom activities with only a little encouragement.	Participates in classroom activities with lots of encouragement.	Does not participate in classroom activities.
Air Is Real	No basis for evaluation.	Actively proposes ways to show and/or reasons to believe that air is real.	Indicates understanding of how demonstrations or hands-on activities illustrate that air is real.	Participates in hands-on activities, but does not readily connect these to the principle that air is real.	Does not participate in activities at all or does not participate with evidence of understanding their purpose.
Air Moves Things	No basis for evaluation	Actively proposes ways to show and/or reasons to believe that air moves things	Indicates understanding how of demonstrations and hands-on activities illustrate that air moves things	Participates in hands-on activities, but does not readily connect these to the principle that air moves things.	Does not participate in activities at all or does not participate with evidence of understanding their purpose.
Air Takes up Space	No basis for evaluation	Actively proposes ways to show and/or reasons to believe that air takes up space	Indicates understanding how of demonstration and hands-on activities illustrate that air takes up space.	Participates in hands-on activities, but does not readily connect these to the principle that air takes up space.	Does not participate in activities at all or does not participate with evidence of understanding their purpose.

B. Authentic Assessment of Children's Learning using Narrative Assessment Tool Keyed to Rubric

-Not available on disk- Selected pages will be enclosed as paper copy

CURI THINKS ABOUT AIR

By Marylou Boynton

Illustrated by M. Boynton & A. Petitto

Curi Thinks about Air
Narrative Assessment Booklet
Explanatory Background

Curi Thinks about Air is a draft of a sample narrative assessment booklet, designed to explore children's knowledge about air. It is keyed to the rubric based evaluation for air, which assesses children's understanding of three basic principles - (1) air is real, we know this even though we can't see air because (2) air moves things and (3) air takes up space.

The book is designed for a co-reading experience in which the reader/examiner poses questions similar to those often asked in the course of reading aloud. Children's answers to these questions can be related to the levels shown on the rubric. For example, if a child can answer the question "How can Curi's friends show her that air is real?" with proposals of showing her that air moves or takes up space, then they would be credited with knowing what evidence supports the existence of air (rubric level 4).

This type of narrative assessment booklet avoids the artificial and sometimes anxiety provoking testing situation that typifies so much assessment; it is a way to obtain information about a child's level of understanding in a positive and familiar context. In addition to serving as an assessment and diagnostic tool, the booklet also serves as a teaching tool - that is, after the child is offered an opportunity to respond, the text answers the questions.

The booklet can be also used in a variety of ways to supplement classroom experiences - it can be available to children in the classroom (where it might be looked at by individuals or used in a question-answer format by peers), shared with visitors, or taken home to be read with parents and siblings.

Responses to Co-Reading Questions: Curi

Child _____ Class _____

Examiner _____ Date _____

1. L4

Suggests evidence for air _____

Off topic _____

Don't know

2. L4

Suggests things air can do _____

Off topic _____

Don't know

3. L4

Gives examples of air filling things _____

Off topic _____

Don't know

4. L3/2

L3: Says bag will fill up, get big, puffy, etc _____

L2: Don't know

5. L3/2

L3: Friend blew air in the bag _____

L2: Don't know

6. L3/2

L3: Air is in the bag _____

L3: Don't know

7. L3/2

L3: Air was pushed out of the bag _____

L2: Don't know

8: L4

L4: Suggests ways to observe moving air _____

9: L2/3

L3: Air will move paper, blow paper away, etc. _____

10. L3/2

L3: The nails will move, make sound, bump, etc. _____

L2: Don't know

Summary: Indicate the number of answers at each level.

L4 _____

L3 _____

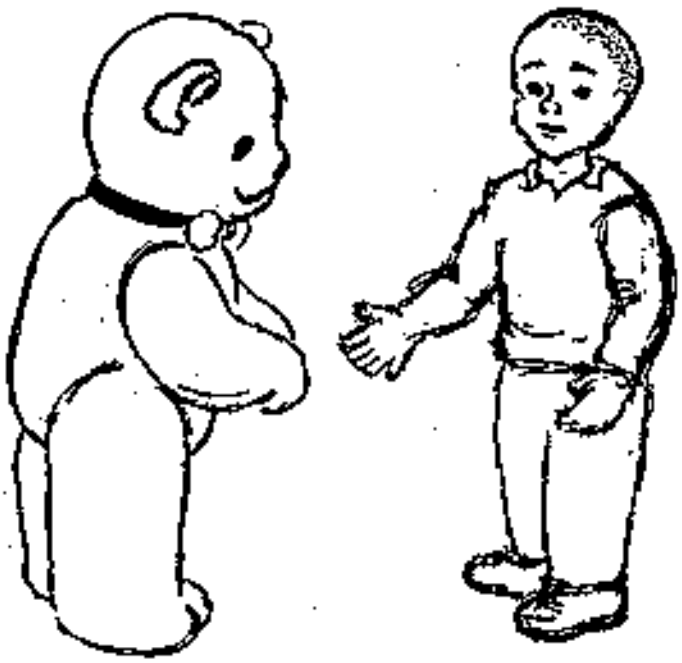
L2 _____

"Today," said Curi's teacher at Head Start, "we are going to learn about air. Air is all around us."

"Where is it?" asked Curi. "I don't see anything all around me."

"Friends," said Curi's teacher, "how can we show Curi that air is real?"

(1.L4) *How can Curi's friends show her that air is real?*



"You can't see air," said a friend, but you can see what air does."

"Oh," said Curi. "What does air do?"

(2.L4) *What do you think air can do?*

"Air can fill things up," said a friend.

(3.L4) *How can we show Curi that air fills things up?*