

# EVERY BREATH WE TAKE



## SCIENCE LESSON

### BOOK CONCEPT

"AIR IS ALL AROUND.  
IT IS ESSENTIAL FOR US TO LIVE.  
CLEAN AIR HELPS US STAY ACTIVE  
AND HEALTHY. RUNNING, WALKING,  
SWIMMING, SINGING, AND EVEN TALKING  
CAN MAKE US GET OUT OF BREATH -  
SO WE HAVE TO BREATHE EVEN HARDER.  
IT IS IMPORTANT THAT  
EVERY BREATH WE TAKE  
BE FULL OF CLEAN, FRESH AIR."

### OBJECTIVE

YOUNG CHILDREN WILL LEARN  
BASIC INFORMATION ABOUT  
THE CONCEPT OF AIR THROUGH  
VISUAL AND HANDS-ON ACTIVITIES

### MATERIALS

- 3 LIDDED JARS: 2 WITH OBJECTS INSIDE (I.E. ONE WITH MARBLES, THE OTHER COTTON BALLS), THE OTHER EMPTY
- DEFLATED BALLOON
- GLASS OF WATER WITH STRAW
- STOPWATCH
- LARGE PAPER/CHALKBOARD/WHITEBOARD

## ACTIVITY

### Breathing Experiment

#### 1 PRESENT

the three jars. Hold each jar up, shake, and ask,

*How many jars have something inside?*

*How many think there are two jars with something inside?*

*How many think there are three jars with something inside?*

Prompt the children to think of something that is all around us, even though we cannot see it. Provide the answer that air is in the third jar.

#### 2 DEMONSTRATE

the concept of air being present even though we cannot see it. Force a puff of air out of your mouth and encourage the children to do the same. Ask if they saw anything.

Then take an deflated balloon and begin to blow into it, calling attention to the expansion of the balloon.

Show the glass of water, insert a straw and blow bubbles, and explain the bubbles they see are air.

#### 3 EXPLAIN

that they are going to see how being active affects their breathing.

Ask for two volunteers and explain that they will be asked to count their breaths.

Tell them to sit and breathe normally and, when you say, "Go," to count how many breaths they take until you tell them to stop (20 seconds). Count your own breaths as well.

Record the names and number of breaths (a bar graph works well).



FOR MORE INFO ON CLEAN AIR:  
[www.momscleanairforce.org](http://www.momscleanairforce.org)

SAY HELLO AND SEND US PICS:  
[info@momscleanairforce.org](mailto:info@momscleanairforce.org)

**MOMS**  
*clean air*  
**FORCE**

FIGHTING FOR  
OUR KIDS' HEALTH

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## ACTIVITY

### Breathing Experiment

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### EXPLAIN

that this time around, when you say "Go," the children should jump in place until they hear you say, "Stop jumping, sit down, and start counting."

They will then sit down and start counting their breaths until told to stop (you will jump and count your own breaths as well). Say "Go," time them for 20 seconds (while you jump as well), then say, "Stop jumping, sit down, and start counting." Set the timer for another 20 seconds (count your breaths as well).

Record the number of breaths (in a different color if using a bar graph).

5

### DISCUSS

Ask children if they notice anything about the results.

Prompt them to notice that breathing is faster when people are active and explain that this is good for our health because it brings more air and oxygen into our bodies when we need it.

Prompt them to notice that their rates are higher than yours. Stress that children take in lots of air, especially when active, and their lungs are still growing.

We want to breathe air that is clean, not dirty, to be as healthy as possible!



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