

KidsHealth.org/classroom

#### Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

#### **Standards**

This guide correlates with the following National Health Education Standards:

#### Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.



## Prek to Grade 2 • Human Body Series Respiratory System

It's so vital to life that we do it automatically - all day, every day. What is it? Breathing! Although it may happen automatically, it couldn't happen at all without the respiratory system. The following activities and discussion questions will help your students understand how the respiratory system works and what they can do to keep theirs healthy.

#### Related KidsHealth Links

#### **Articles for Kids:**

#### **Looking at Your Lungs**

KidsHealth.org/kid/body/lungs\_noSW.html

#### Respiratory System (Movie)

KidsHealth.org/kid/closet/movies/how\_the\_body\_works\_interim.html

#### Why Exercise Is Cool

KidsHealth.org/kid/exercise/fit/work\_it\_out.html

#### Smoking Stinks!

KidsHealth.org/kid/watch/house/smoking.html

#### Why Do I Yawn?

KidsHealth.org/kid/talk/qa/yawn.html

### **Discussion Questions**

Note: The following questions are written in language appropriate for sharing with your students.

- 1. During a check-up, the doctor asks you to take a deep breath in and then let it out. What is a breath? What is breathing? Why do you need to breathe?
- 2. What parts of your body are used for breathing? Take a deep breath. Where did the air come in? What part of your body got bigger?
- 3. How do different activities, like running or swimming, affect your breathing?
- 4. What happens to your breathing when you sleep?

Your state's school health policies: nasbe.org/HealthySchools/States/ State\_Policy.asp





## Prek to Grade 2 • Human Body Series Respiratory System

### **Activities for Students**

Note: The following activities are written in language appropriate for sharing with your students.

#### Take a Breath!

#### **Objectives:**

Students will:

- Understand why we need to breathe
- Demonstrate what happens inside our lungs when we inhale and exhale

#### Materials:

Name tags

#### Class time:

15 minutes

#### **Activity:**

Breathing is necessary for life. Why? Because your body needs oxygen. The respiratory system brings fresh air filled with oxygen through your nose and mouth, down your windpipe, and into your lungs. The lungs let the fresh air into your body and collect the used-up air and push it out of the body when you breathe out. Practice inhaling (breathing in) and exhaling (breathing out). Put your hands on your chest to feel what happens to your lungs and chest when you inhale and exhale.

Now it's time to turn the class into a breathing system! We're going to have three different groups: lungs, new air (or oxygen), and old air (or carbon dioxide). You'll be given a name tag with your group listed on it. Everyone in the "lungs" group will join hands to form two circles, leaving a small opening at the top of each circle. This group will practice expanding the lungs during inhalation, or breathing in, by stepping out and then stepping in during exhalation, or breathing out. The group labeled "old air" will stand outside the lungs, and the "new air" group will stand near the opening of the lungs. Then show what happens when someone takes in a deep breath. As the lungs expand, the new air will enter the circles through the openings and then move under the joined hands of the lungs to leave the lung circles. Then show what happens when someone breathes out: The old air will pass under the joined hands of the lungs and then out through the opening of the lungs.

#### **Extensions:**

- 1. Ready to add some more body parts to the mix? Add the windpipe (or trachea), mouth, nose, and voice box (or larynx). Add a diaphragm that pushes and pulls the lungs during breathing.
- 2. Turn the respiratory system into a roller coaster! On a large sheet of poster board or paper, draw a roller-coaster track that resembles our breathing system, complete with oxygen cars that start at the nose and follow the windpipe to the lungs and back out again.





## Prek to Grade 2 • Human Body Series Respiratory System

### Mr. Sadlungs

#### **Objectives:**

Students will:

- · Identify activities that exercise the respiratory system
- · Explain ways to keep the breathing system healthy

#### **Materials:**

Exercises for Healthy Lungs handout (available at: KidsHealth.org/classroom/prekto2/body/systems/respiratory\_handout1.pdf)

#### Class Time:

20 minutes

#### **Activity:**

Mr. Sadlungs has just arrived at your gym and needs a new exercise routine. His lungs and breathing system aren't too healthy right now, and he wants to change that. How can you help?

What kind of advice or pointers can you give him about keeping and making his lungs healthy and strong? Using the handout, write and draw some of your guidelines. Using the Exercises for Healthy Lungs handout, design a workout routine for him with specific exercises that will make his breathing slow, normal, and fast.

#### **Extension:**

1. Practice some breathing control with the Ha-Ha game. As a class, lay on the floor in a large circle with each student's head on top of his or her neighbor's stomach. Designate a first person to say "ha." The second student has to say the word twice: "Ha, ha." The third person then says "ha, ha, ha," and the ha-has continually grow around the circle. Have fun trying to control the number of times you say "ha" as you feel your lungs and diaphragm at work!

## Reproducible Materials

Handout: Exercises for Healthy Lungs

 ${\it KidsHealth.org/classroom/prekto2/body/systems/respiratory\_handout1.pdf}$ 



KidsHealth.org is devoted to providing the latest children's health information. The site, which is widely recommended by educators, libraries, and school associations, has received the "Teachers' Choice Award for the Family" and the prestigious Pirelli Award for "Best Educational Media for Students." KidsHealth comes from the nonprofit Nemours Foundation. Check out www.KidsHealth.org to see the latest additions!





# Human Body Series Respiratory System

Name:

Date:

## **Exercises for Healthy Lungs**

Instructions: Design a workout routine for Mr. Sadlungs with specific exercises that will make his breathing slow, normal, and fast. Fill in each square with drawings or pictures of the exercise, and use the space below to describe what Mr. Sadlungs needs to do.