

- The MORE HEALTH website is equipped with a Classroom TEACHER section.

  Here you will find pre- and post-visit activities, vocabulary words, and in many cases pre-and post-visit videos.
- Visit morehealthinc.org <a href="https://www.morehealthinc.org/teachers/">https://www.morehealthinc.org/teachers/</a>
- Password: resources

#### **Pre-Visit Activities**

- Review the enclosed Vocabulary. Students do not need to have a working knowledge of the terms, rather a beginning familiarity.
- Click the link to play video: *How Lungs Work* (5:21 minutes)

  <a href="https://kidshealth.org/en/kids/rsmovie.html?WT.ac=en-k-htbw-main-page-c">https://kidshealth.org/en/kids/rsmovie.html?WT.ac=en-k-htbw-main-page-c</a>
  If time permits, video has activities and a quiz on the website.
- Read aloud: Your Respiratory System by Judith Jango-Cohen.
- Create a writing activity for your students having them research the respiratory systems of different mammals, fish, reptiles, or insects. They could compare and contrast the different systems (i.e., the respiratory system of the largest and smallest mammal bumble bee bat/great blue whale).

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## **Suggested Post-Visit Activities**

- Have students complete the Respiratory System diagram.
- Use the **Lung Worksheet** as an additional resource: homework, extra credit, etc. For teacher reference, an answer key is provided (page 6).
- As a fun review, click the link to play video: *Respiratory System-Brain Pop* (3:16 min) https://www.voutube.com/watch?v=2nDONG9ex18
- Conduct an experiment showing how oxygen is necessary for burning to occur. Place a lighted candle in a dish and put a jar over it. The candle will go out when all the oxygen is used up. Fire needs oxygen to burn, just like our bodies use oxygen to burn its food.
- Students can use their lungs in this fun race. Items needed: cotton balls, straws, and a flat surface. The object is to blow through the straws and push the cotton balls from the start to finish line. Winner is the one who gets the cotton ball across first.
- As an art project, have students paint a diagram of lungs using their lungs. Items Needed: Bowls, Tempera paints, paintbrush, straw, printout of lung outline. In bowls, mix the paints with water to achieve a runny consistency. Apply paint onto the brush and gently shake it over the printout so there are scattered drops in the lungs. Have them blow through the straw, aiming at each drop. This will cause the paint to branch out forming the bronchi and the bronchioles.
- Have your students research different illnesses/diseases that can cause distress to the lungs. Their report can include the illness, whether it is genetic, environmental, or self-induced due to risky behaviors, and if there is a cure or treatment to help.

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### **Vocabulary**

• airways<sub>n</sub> tunnels for air that travel from the nose or mouth to the lung

• allergies<sub>n</sub> bad reactions to certain things, such as animals, pollen or food

• alveolin microscopic air sacs in the lungs

• Asthman a lung disease that affects the breathing tubes by narrowing them

• **bronchin** the two large airways of the lungs

• **bronchial tubes**<sub>n</sub> the smaller breathing tubes of the lungs, that look like tiny tree branches

• carbon dioxide<sub>n</sub> a gas produced as a waste product in the body exhaled by the lungs

• **diaphram**<sub>n</sub> a large muscle under the ribs that separates the lungs from the other organs

• **inflamed**<sub>adj</sub> sore or swollen

• **inhaler**<sub>n</sub> something that has medicine in it to help people breathe easier

• larynx<sub>n</sub> the voice box, airway between the throat and the trachea

• lungs<sub>n</sub> the organ of a person that takes in air and supplies oxygen to the blood

• **mucus**<sub>n</sub> a thick, slimy substance that is produced in the airways and nose

• **oxygen**<sub>n</sub> a gas that is needed by cells in the body and is taken from the air by the lungs

• **pollution**<sub>n</sub> human-made waste that harms the earth's air, land or water

• **respiratory** the body system made up of the lungs, blood vessels, airways that allow us to

system<sub>n</sub> breathe

• toxicadj harmful, poisonous

• **trachea**n the windpipe, a firm breathing tube between the larynx and the bronchi

• **triggers**<sub>n</sub> something that causes something else to happen

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### Goals

- Students will understand the structure and function of the lung and respiratory system.
- Students will understand their responsibility for their healthy lungs.
- Students will understand the importance of monitoring pollutants and other irritants to protect their lungs.

## **Objectives**

- Students will be able to locate the lungs and identify the parts of the respiratory system.
- Students will be able to define alveoli, bronchi, airways, and oxygen as they relate to the lungs.
- Students will be able to describe what happens to the respiratory system when it is impaired due to asthma and allergies.
- Students will be able to name at least three ways to keep their lungs healthy (e.g., exercise, avoid pollutants, cigarettes, and asthma triggers).

## **Standards**

The student will	
HE.5.B.3.3	compile resources from home, school, and community, technologies that provide valid
	health information. (suggested post-visit activity)
HE.5.B.5.1	describe circumstances that can help or hinder healthy decision making.
HE.5.B.5.2	summarize healthy options to health-related issues or problems.
HE.5.B.5.3	compare the potential short-term impact of each option on self and others when
	making a health related decision

- making a health-related decision. HE.5.B.5.4 select a healthy option when making decisions for yourself and/or others. specify a personal health goal and track progress toward achievement. HE.5.B.6.1
- HE.5.C.1.1 describe the relationship between healthy behaviors and personal health.
- explain ways a safe, healthy home and school environment promote personal health. HE.5.C.1.3
- compare ways to prevent common childhood injuries and health problems. HE.5.C.1.4
- HE.5.C.1.5 explain how human body parts and organs work together in healthy body systems, including the endocrine and reproductive systems.
- recognize how appropriate health care can promote personal health. HE.5.C.1.6
- predict how friends/peers may influence various health practices of children. HE.5.C.2.2
- model responsible personal health behaviors. HE.5.P.7.1
- illustrate a variety of healthy practices and behaviors to maintain or improve personal HE.5.P.7.2 health and reduce health risks. (*suggested post-visit activity*)
- HE.5.P.8.1 persuade others to make positive health choices.

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SC.5.L.14.1	identify the organs in the human body and describe their functions, including the skin,
	brain, heart, lungs, stomach, liver, intestines, pancreas, muscles and skeleton,
	reproductive organs, kidneys, bladder, and sensory organs.
SC.5.L.14.2	compare and contrast the function of organs and other physical structures of plants
	and animals, including humans. (pre-visit activity)
ELA.5.C.1.4	write expository texts about a topic using multiple sources and including an
	organizational structure, relevant elaboration, and varied transitions.
	(pre/post-visit activities)
ELA.5.C.3.1	follow the rules of standard English grammar, punctuation, capitalization, and spelling
	appropriate to grade level. (pre/post-visit activities)
ELA.5.C.4.1	conduct research to answer a question, organizing information about the topic and
	using multiple reliable and valid sources. (pre/post-visit activities)
ELA.5.V.1.1	use grade-level academic vocabulary appropriately in speaking and writing.
PE.5.L.3.1	identify a moderate physical activity.
PE.5.L.3.2	identify a vigorous physical activity.
PE 5 R 6 2	explain the benefits of physical activity

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# Lung Worksheet Answer Key

1.	Our Respiratory	system is ma	de up of organs and tiss	sues that keep us				
	breathing. This system is a	made up of our Lung	sBlood	<u> </u>				
	vessels, Airways	, andMuscl	es	_·				
2.	Healthy lungs are Pink	and s	quishy like a sponge and	Stretchy				
	or rubbery like a balloon.							
3.	Our lungs are divided into	sections called Lo	bes	e.				
4.	The Left	lung is smaller to all	ow extra room for the _	Heart				
5.	The primary job of our respiratory system is to breathe in fresh air or Oxygen							
	and get rid of stale air or Carbon Dioxide							
6.	The process of breathing	happens approximate	ely 20,000	times a day!				
7.	The airways are your No	ose	_, mouth, _ Larynx	(voice box),				
	Trachea	(windpipe) and the	Bronchus	tubes.				
8.	Cilia	move back and forth	n like a broom to keep fl	uids or dust out of				
	your lungs.							
9.	The Diaphragm	is a d	ome shaped muscle loc	ated below your				
	lungs.							
10.	.0. Things that can hurt our lungs and cause breathing difficulties include:							
	Smoking Vaping							
Pollution Infection								
	Allergies		Asthma					
11. Things you can choose to do to help keep your lungs healthy:  Wash Hands  Exercise  Avoid Allergens								

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