



PRESENTED BY:



## Lesson 3 – Lung Health

### The Lungs and the Respiratory System

The respiratory system is a system of organs within the body that allows oxygen to enter the body; this system is also responsible for exhaling carbon dioxide once the body has utilized all of the energy the oxygen can provide. The following make up the respiratory system: the nasal passage, oral cavity, pharynx, larynx, trachea, bronchi, lungs, airways and the diaphragm.

#### Here's how it works:

1. Air is inhaled through the nasal passage and/or oral cavity and travels through the pharynx, larynx and trachea into the bronchi leading to the lungs. It is pulled into the lungs as the result of a contraction in the diaphragm muscle.
2. Once it reaches the lungs, the air travels through a series of airways and oxygen is absorbed and transferred to the blood stream through the pulmonary venule and is carried to the heart and then the rest of the body. Once the oxygen is used, a carbon dioxide waste is created.
3. The pulmonary arteriole carries the de-oxygenated blood back to the lungs where the carbon dioxide is then released back into the lungs and exhaled.

#### Try This:

- 1) Make Your Own Lung:** to conduct this activity you will need: a plastic 2 liter bottle with the bottom cut off, a balloon, a rubber band, and a plastic grocery bag. Visit: <https://youtu.be/vRv2zYH5p9k> to see the full activity.

#### Follow Up Questions:

- a) What happened when you pulled down on the plastic bag?
- b) What part of the respiratory system acts in the same way as our plastic bag, pulling air into the lungs?

- 2) Create your own respiratory system.**

Create a colorful drawing that shows each of the parts of the respiratory system. Use blue arrows to show oxygen rich air entering the respiratory system and use red arrows to show carbon dioxide leaving the respiratory system.

**Is your school interested in free asthma education? Call the American Lung Association at 405-748-4674 to learn more about the free Open Airways program for schools.**

You can find more information at

[www.LUNGFORCE.org](http://www.LUNGFORCE.org)



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