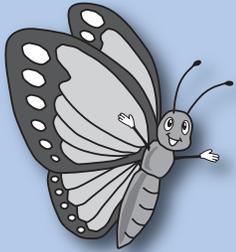


Breathing Is Easy, Isn't It?

ACTIVITY

9



Learning Objective:

- Introduce asthma and demonstrate how it may feel to have an asthma attack.
- Understand asthma triggers and that air pollution is one of those triggers.

Subjects

- Health
- Science

Materials

- Cocktail straws or coffee stir-sticks
- Soda size straws
- Breathing is Easy, Isn't It? student worksheet

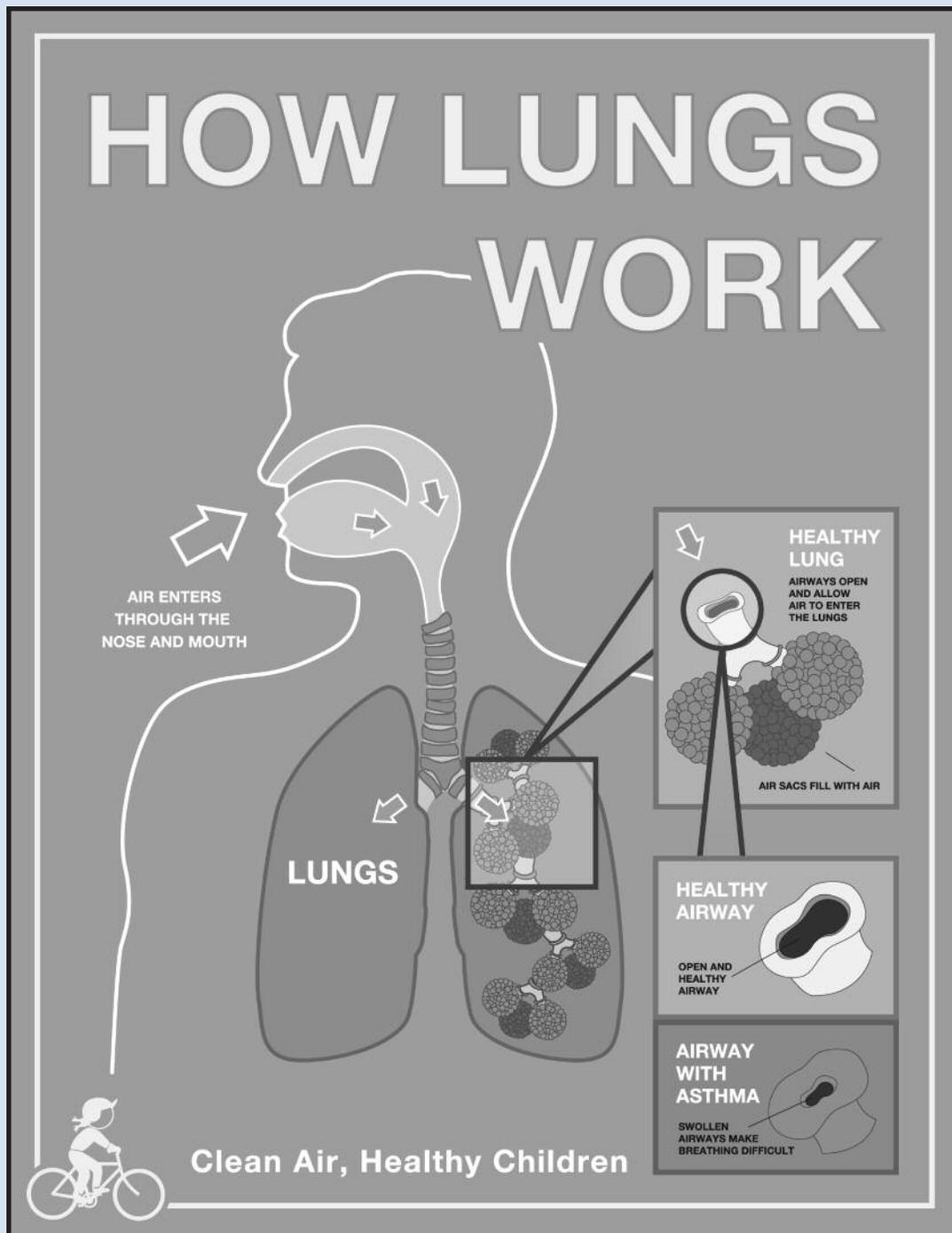
Teacher's Background Information

NOTE: This activity may be difficult for students with asthma.

Air pollution can affect the health of everyone, from mild irritation of the eyes and throat to causing an asthma attack. Asthma is a chronic lung disease that can affect people of all ages. In fact, asthma is the leading serious chronic illness of children. In this activity, the students will learn what it may feel like to have an asthma attack by breathing through straws of different diameters. Breathing through the wider straw is relatively easy. Then students try breathing through the narrow straw, which represents the narrowed airways of an asthmatic during an attack; and they realize how difficult it is to breathe.

So what happens during an asthma attack? A few things happen (see graphic): The airways (throat, bronchial tubes, and bronchioles) narrow due to swelling and inflammation. Also, the muscles around the airways tighten, further narrowing the airways. And lastly, excessive mucus is produced in the airways further blocking air flow.

Many things can trigger an asthma attack, such as cold air, pet dander, dust mites, exercise, or air pollution; so it is important for people with asthma to learn their triggers. Students will learn about asthma triggers in this activity as well.



For more information about the sources of air pollution and what we can do to reduce air pollution, see the Introduction section.

For more information on asthma visit the American Lung Association or request a free copy of Clean Air Healthy Children from the DNR. To order please e-mail DNRAirEducation@wisconsin.gov.

Remember:

- Teachers, please remember to post or make available the **bold-faced** vocabulary word definitions in each activity (*see the glossary on page 65 for definitions*).

Breathing Is Easy, Isn't It?

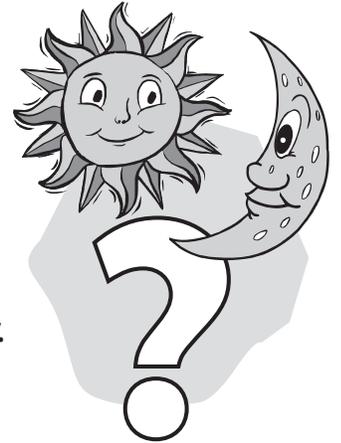


Here's a riddle for you. See if you can guess what this is:

It is something we do all day long – even when we are sleeping.
And it is so important we couldn't live without doing it. What is it?

Do you know the answer?

Do you know why breathing is so important? Each and every breath we take brings **oxygen** into our body. Our brain, organs, and muscles need oxygen to work properly. So breathing in clean air is important for our bodies.



Activity

For this activity, please find two different-sized straws. Make sure one is skinny (like a coffee stirring straw) and one is fatter (like a soda straw).

- Put the big straw in your mouth and plug your nose. Try to breathe only through the straw. Can you do it? What did it feel like?



But what if you had **asthma**? Would breathing always be so easy? Let's find out...

- Now pick up the skinny straw. Put it in your mouth and plug your nose like before and try breathing only through the straw. What does it feel like? Is it harder or easier to breathe through the skinny straw?

