

Period: _____

Name: _____

Allergies

K (What do you know about this topic?)	W (What do you want to know? 3 questions)	L (What did you learn after reading/discussing this topic)

Name: _____

Period: _____

Asthma

Van

K (What do you know about this topic?)	W (What do you want to know? 3 questions)	L (What did you learn after reading/discussing this topic)

Group Projects

Group A:

Define **allergen** and **allergy**; give examples of things to which one might be allergic (*refer to the board and see if you can add some new allergens, not yet listed*).

Examples of allergens include medicine (*penicillin*), animals (*dander/feathers*), fabric (*wool*), cosmetics (*soap/perfume*), food (*milk, nuts, chocolate, wheat*), plants (*ragweed*), mold. Include bee stings and poison ivy in your presentation.

Compare and contrast characteristics of allergies, asthma, and a cold. Present this in a visual form (*graphic organizer*) on a poster, computer, or other technology that displays visual media.

Group B:

Through the use of drawings, demonstrate how our immune system works.

Then, select an allergen and demonstrate the allergic process—use large rolled paper or technologies that allow for your drawings (*refer to drawings in the issue for guidance*). Include the following in your explanation:

the role of antibodies in reacting to allergens
the effects of histamine on the body

Here is additional information on antibodies:

Our immune system is like an army, with white blood cells as our soldiers and T-cells as our scouts that watch out for invaders.

Everyday your body fights off thousands of germs.

Your white blood cells make the antibodies that help fight those germs.

When germs enter the body, they stimulate T-cells (a type of white blood cell) which act like army scouts.

The scouts warn the white blood cells that a germ has entered.

The white blood cells make antibodies to attack the germs.

Group Projects cont.

Group C:

Role-play the following: An allergist has many patients, each of whom has a different allergy. Select from some of these examples: medicine (penicillin); animals (dander/feathers); fabric (wool); cosmetics (soap/perfume); food (milk, nuts, chocolate, wheat); plants (ragweed); mold, bee stings, and poison ivy. Make sure you could explain the symptoms associated with the allergen and the conditions under which you have an allergic reaction. Through questions that the allergist asks, and answers from the patients, the group will relate various symptoms (including simulating allergic conditions like sneezing, stomach ache, cough, skin rash, etc.) and the allergist will try to determine the allergen and make recommendations to relieve the symptoms (avoid certain foods, use foam instead of feather pillow, use antihistamines for pollen). Some facts you might include: asthma is not an allergy, but often the symptom of an allergy; between episodes, asthmatics can be perfectly healthy.

Suggested allergist questions: Do you have any allergies that you already know about? Does anyone in your family suffer from allergies? Do you live in the city or country? What are your symptoms? Where do these symptoms occur? (When you're outside? Inside?). How long do they last? Do these symptoms occur at the same time every day? Is your pillow made out of feathers or foam?

Group D:

Define asthma. Take a close look at the section entitled "Asthma Alert." Have one student play Matt; another the school nurse; the third Matt's teacher. The rest of the group plays Matt's classmates. Matt acts out his asthma attack (it happens in class); the school nurse tells Matt what to do to calm the attack and what he might have to do to control further attacks (diet, medication, stress level, participate in certain sports only); the student playing the role of teacher explains to the class what is happening in Matt's body during the attack. The group of students playing the class decides how they should react toward Matt.

Group E:

Whether you have mild allergies, asthma, react to poison ivy or bee stings, there are certain actions that can be taken to better live with the condition, including ways to avoid allergens that might cause reactions. Using the information in the Student Issue, make three separate action plans:

1. How to live with allergies
2. How to live with asthma, and
3. How to immediately respond to contact with poison ivy/oak. Explain each action plan to the class using diagrams, charts, oral presentations, or role-play.

Question to ask the class, after the presentation: How can you avoid allergic reactions?



Facts for Families

Name: _____

Date: _____

Parent/Guardian Signature: _____

Please sign and return to school with your son or daughter.

Dear Parent:

This month in THE GREAT BODY SHOP, we have been studying about allergies and asthma. The class also has been reviewing how to make good decisions and how to say "No!" The homework assignment is for each child to teach a family member something he or she has learned about allergies and asthma. The teaching must include instruction in one of these important skills: decision making, saying "No!," and/or comparing and contrasting. After the assignment is finished, please answer the following questions:

1. What did your child teach you about allergies or asthma?

2. Did your child include an important skill when teaching you about allergies or asthma?

Which skill did your child teach? (*decision making, compare and contrast, how to say "No!"*)



Slow Breathing Exercise

Name: _____

Date: _____

Relaxing can help you if you are having trouble breathing.

It can also help you cope with stress.

1. Sit up straight in your chair. Let your arms hang down at your sides. Close your eyes. Concentrate on breathing slowly and deeply.
2. Tighten the muscles in your face as if you were frowning. (*Don't hold your breath.*) Count to five. Then, let your face muscles relax completely. Count to five.
3. Make a fist, shrug your shoulders and tighten the muscles in your arms. Count to five. (*Don't hold your breath.*)
4. Now, concentrate on relaxing all your muscles. Count to five. Keep breathing slowly and deeply.
5. Curl your toes and tighten up the muscles in your feet. Count to five, then relax them.
6. Take two more deep, slow breaths. Think about relaxing all your muscles, so that you're limp, like a rag doll.



close your eyes

breathe deeply
and slowly

tighten muscles,
then relax them



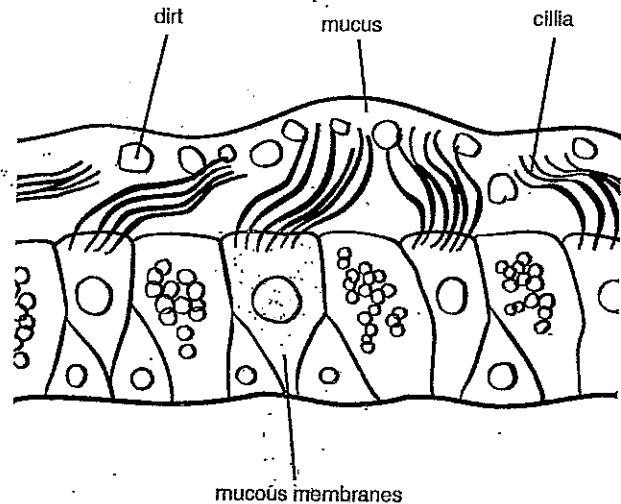
Danger in the Lungs!

Name: _____

Date: _____

Read the information below. Then, with a partner, answer the three questions at the bottom of the page. Partners will assess each other according to the following performance standard: Did students consider at least one way per scenario to confront the proposed problems?

1. Dust and dirt particles from the air enter your nose when you breathe. Your **mucous membranes** produce sticky mucus to trap these particles.
2. Meanwhile, **cilia** beat back and forth, waving to brush out these particles, along with extra mucus.
3. Slowly, the particles and mucus are pushed back up to the throat and you swallow them. That's OK; your stomach can handle the dust and dirt that would irritate your lungs.



But Inside a Smoker's Lungs . . .

The smoke from tobacco contains poisonous gases which paralyze the cilia. They then can't brush dust and extra mucus out of the lungs. The airways get clogged with extra dirt (*from the tobacco*) and smoke. Mucus is also a great place for infections to grow, and smokers get a lot more of them than others do. Finally, the hot, dry air irritates the lungs and makes smokers cough.

Think About It

1. You are in a restaurant. The man at the next table lights a cigar after he finishes his dinner. What can you do?
2. Your cousin Gordon has always had allergies. "I think they're getting worse," he tells you, as he lights another cigarette. What can you say?
3. You have allergies. Your mother smokes. You think that her smoking is making your symptoms worse. What can you do?

Bee Sting

Name: _____

Date: _____

BEE STING

Bee stings can be very dangerous for people who are allergic to bee venom. The first thing you should do if you notice any symptoms is to call an adult to get the victim to the hospital. If you have 911 in your community, use it. If you don't, call the emergency number which you should have posted by the phone. Symptoms include:

wheezing, difficulty breathing

swelling around the lips, tongue, face, or sting location (a whole arm or leg may swell)

skin rash, itching, hives, or feeling of warmth

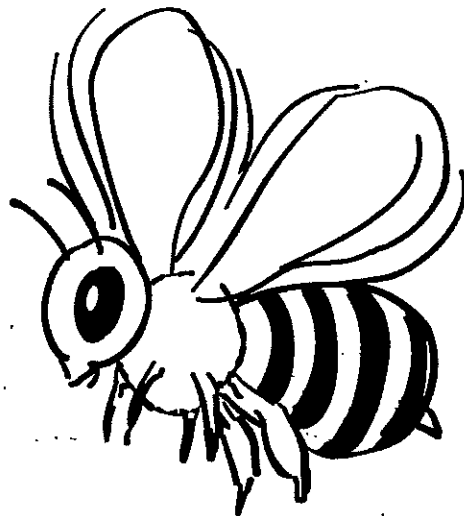
Secondly, you should ask the victim if there is an insect sting kit on hand (usually if a person is allergic to bees and knows it, he/she will keep a kit available at all times). If the reaction is happening, and there are no adults anywhere around to help, you will have to use the items provided in the kit on the victim. In the kit are the following items:

antihistamine (to block the effects of the histamine)

a syringe containing epinephrine (to relax the spasm in the airway and open up the airway)

An adult should use the insect sting kit, but you need to know how just in case.

For people who are not allergic to bee stings, the stinger may be removed by scraping or flicking it out. Never use tweezers or squeeze the stinger, because venom may still be present. If the stinger isn't visible, assume that there isn't one. A cold pack or ice cube can be applied to help reduce pain and swelling.



What Should You Do?

Name: _____

Date: _____

severe asthma episode

1. call 911, or appropriate emergency number in your area
2. follow emergency instructions carefully, including name of person, age, medications taken and when taken, etc.
3. make sure person is not choking
4. keep calm, reassure

extreme allergic reaction

1. call 911, or appropriate emergency number in your area
2. make sure victim is breathing (feel air coming from nose and mouth)
3. keep person calm
4. if conscious, find out if he/she is taking any medication, or if he/she has a history of allergy
5. find out age, name of doctor

mild allergic reaction

1. remove the person from the situation (*e.g., if allergic to cat, remove animal*)
2. call adult or doctor, stay with person until you are sure that this is only a mild reaction
3. tell an adult
4. bee sting can be removed by scraping or flicking (don't squeeze the stinger) and applying a cold pack
5. contact with poison ivy
6. wash skin and clothes with soap and water within 10 minutes of touching plant to get rid of oil from the plant.

choking

1. If you see someone who seems to be choking, ask "Can you speak?" If the person can speak, or is coughing, do nothing. If the person cannot speak, continue on to step 2.
2. Shout for help.
3. Give up to 5 back blows between the shoulder blades with the heel of your hand.
4. Then, if choking continues, stand behind the victim and begin abdominal thrusts. Put your arms around the victim's waist. Make a fist with one hand.
5. Put the fist on the victim's abdomen, just above the belly button but below the ribs. Make sure the thumb of your fist is against the abdomen.
6. Cover the fist with your other hand. Use this hand to push your fist in and up quickly.
7. You may need to repeat Step 5 several times.



Portfolio Page—Health Values

Name: _____

Date: _____

Think of all the health values with which you identify. Rank them according to their importance to you. Write a paragraph on how these health values will help to keep you from engaging in risk taking behaviors.

(Use the back of this page if you need more room.)

Solve the Mystery

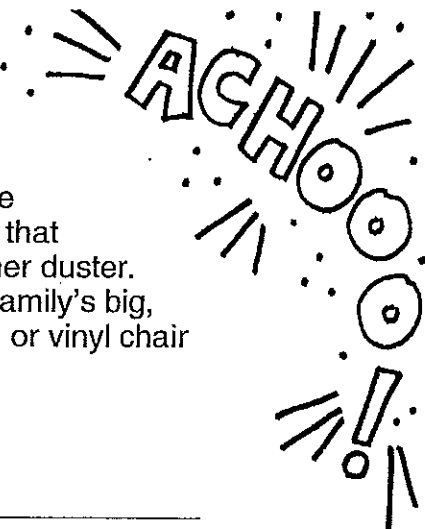
Name: _____

Date: _____

Parent/Guardian Signature: _____

Billy's allergies were worse in the afternoons and at night, but didn't bother him in school. He found it much easier to breathe outdoors, rather than indoors. He had his worst allergy attack the day he helped clean and sweep the attic.

Billy's allergist suggested that the rugs and floor in his house should be vacuumed frequently. The doctor also suggested that dusting should be done with a damp cloth, but never a feather duster. Finally, the doctor told Billy it would be best not to sit in his family's big, overstuffed chairs and sofas, but to choose a wood, leather, or vinyl chair instead.



1. Can you guess what Billy is allergic to?

2. Why does Billy feel better outdoors, rather than indoors?

3. Why did he have such a severe attack when cleaning the attic?

4. Why can he vacuum and damp dust, but not sweep or dust with a feather duster?

5. Why did the doctor tell Billy it was better to sit in a wood, vinyl, or leather chair?

