

GED 2002 Teachers' Handbook of Lesson Plans

Area/Skill - Science	Cognitive Skill Level - Application/Analysis	Correlation to Framework - 03.02/03.04/03.05	Lesson Number - 27
<p>Activity Title - Breathe Easy</p> <p>Goal/Objective</p> <p>To identify and analyze the reasons for lung disease, as well as preventative measures.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>Lung disease is the number three killer in America. It is responsible for one in seven deaths. For babies younger than one year of age, lung disease is the number one cause of death. More than 30 million Americans live with chronic lung disease. Some of these diseases are caused by substances that surround us. Many of these types of diseases can be prevented.</p> <p>Activity</p> <p>As a class activity, make a "KWL" chart about substances that are known to cause lung disease. ("KWL" stands for What I <u>K</u>now, What I <u>W</u>ant to Know, What I Have <u>L</u>earned.) A sample chart is located in Handout - KWL. Most students will know that cigarette smoke and air pollution cause lung disease and cancer, but they may not be familiar with other substances such as radon or asbestos. Assign research as necessary or have volunteers from your local Lung Association visit the class so students can talk with them and complete the chart.</p> <p>Debriefing/Evaluation Activity</p> <p>Prepare a large KWL chart on chart paper. Have students list their findings in each of the columns. Debrief the activity by reviewing the research and identifying preventative measures that students can take to reduce their chances of lung disease.</p>		<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • Handout - KWL • Chart paper/board and markers • Paper and pencils • Computers with Internet access • American Lung Association - http://www.lungusa.org/diseases/ • National Heart, Lung, and Blood Institute - http://www.nhlbi.nih.gov/health/public/lung/ 	
		<p>Extension Activity</p> <p>As a follow-up activity, have students use word processing software to create an informational public service brochure or newsletter for your community. If you have access to audio or video recording equipment, try making a radio or videotape public service announcement.</p>	
		<p>ESE/ESOL Accommodations</p> <p>Have students work in small groups where research can be read orally.</p> <p>Have students interview "experts" in the field of lung disease to complete their "What I Learned" segment of the KWL chart.</p>	
<p>Real-Life Connection</p> <p>Use the Internet and your community contacts to line up medical professionals who will allow students to conduct short interviews with them. Seek out doctors and nurses, of course, but don't forget about psychologists, dentists and hygienists, pathologists, microbiologists, emergency medical technicians, dietitians and nutritionists, rheumatologists, physical therapists. Have students create a universal five-question interview sheet so you can role play in class to rehearse phone and Internet etiquette and interview techniques. Then, after the interviews have been conducted, compare and contrast the information gathered on the causes and prevention of lung disease.</p>			

GED 2002 Teachers' Handbook of Lesson Plans - Script

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Activity Title - Breathe Easy

Introduction

Say: Lung disease is the number three killer in America. It is responsible for one in seven deaths. For babies younger than one year of age, lung disease is the number one cause of death. More than 30 million Americans live with chronic lung disease. Some of these diseases are caused by substances that surround us. Many of these types of diseases can be prevented.

Main Activity

Provide students with a copy of the KWL form. *Say:* Today, we are going to assess how much information we personally know about lung disease, as well as what information we would like to know. Take a few minutes and write in everything that you know about lung diseases under the “K” column of your chart. This is the “What I Know” column. Next, write in questions that you would like to know the answers to under the “W” columns. This is the “What I Want to Know” column.

After students have written in their information and questions, debrief the exercise by discussing facts that are known and what the “unknown” is. Divide the class into small groups. Assign different questions to each of the groups to research. Provide them with sample websites, such as those listed, or you may wish to provide speakers to answer the questions.

Say: As your questions are answered, write down what you have learned in the last columns, the “L” column. This is the “What I Have Learned” column.

Closure/Conclusion

Prepare a large KWL form. You may wish to use chart paper or a roll of paper so that all of the ideas from the class can be charted. *Ask:* Before you began your research, what did you want to know? (Chart the students' answers in the first column on the master KWL form). What did you want to know? (Chart the students' answers in the first column on the master KWL form). What did you learn? (Chart the students' answers in the first column on the master KWL form). From what you learned, what are some of the preventive measures that you and others can take to decrease the prevalence of lung disease? (Write the students' ideas in a fourth column on the master list that is entitled Lung Disease Prevention.)

Follow-Up Lessons/Activities

Have students use word processing software to create an informational public service brochure or newsletter for your community. If you have access to audio or video recording equipment, try making a radio or videotape public service announcement.

Use the Internet and your community contacts to line up medical professionals who will allow students to conduct short interviews with them. Seek out doctors and nurses, of course, but don't forget about psychologists, dentists and hygienists, pathologists, microbiologists, emergency medical technicians, dietitians and nutritionists, rheumatologists, physical therapists. Have students create a universal five-question interview sheet and role play the interviews. After the interviews have been conducted, compare and contrast the information gathered on the causes and prevention of lung disease.

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Science Lesson 27 Handout

KWL Sheet for Science		
What I Know	What I Want to Find Out	What I Have Learned