

GED 2002 Teachers' Handbook of Lesson Plans

Area/Skill - Science	Cognitive Skill Level - Analysis	Correlation to Science Framework - 03.02 /03.03	Lesson Number - 05
<p>Activity Title - What's Happening to the Ozone?</p> <p>Goal/Objective</p> <p>To identify the causes of ozone depletion and to generalize how that information affects everyday life.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>Damages to the ozone layer have been brought to the forefront of news in the last few years. People need to be aware of what kinds of things damage the ozone and become conscious of things that people themselves do to contribute to the damages. The consequence of further ozone damages may presents some environmental challenges to the earth's population.</p> <p>Activity</p> <p>Have students brainstorm the known causes of the ozone depletion. Make a chart listing the causes. Have the students discuss how each cause may contribute to the damage of the ozone layer and what affect each has on the earth. Include in the discussion what effect ozone damage has on people's lives.</p> <p>Debriefing/Evaluation Activity</p> <p>Have the students discuss the implications that damage to the ozone has on their own lives. Discuss the need for the students to be aware of the possible causes of ozone depletion. Discuss how they can use products safely so as not to contribute to the damage to the ozone.</p>		<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • Chart paper, markers • Websites for materials include: The Museum of Science, Art and Human Perception - http://www.exploratorium.edu National Aeronautics and Space Administration website http://www.earth.nasa.gov/science/ozone.html 	
		<p>Extension Activity</p> <p>With all of the activity in space, students may wish to find out if space travel affects the ozone. Because there may be numerous causes for the depletion of the ozone, have students research what other kinds of situations may also have an affect on the ozone and report their findings to the class.</p>	
		<p>ESE/ESOL Accommodations</p> <ul style="list-style-type: none"> • Pair students with others through use of peer tutoring or assistance. • Provide definitions of terms that are unfamiliar. • Allow students to report verbally, in writing or through drawings or models. 	
<p>Real-Life Connection</p> <p>Ozone depletion is a real-life concern. Have students conduct a survey of their home, car, community and work place for possible items that could cause damage to the ozone. Have the students then present their findings to the class. Discuss how some of these items could be fixed or eliminated in order to help lessen damage to the ozone layer.</p>			

GED 2002 Teachers' Handbook of Lesson Plans - Script

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Activity Title - What's Happening to the Ozone?

Introduction

Ask: What is the ozone? Discussion should center on how the ozone is a layer around the earth and is important in keeping out the harmful rays of the sun. *Ask:* What is meant by damage to the ozone? Answers should include such things as holes in the layer itself, thinning of the layer, weakening the layer, etc.

You may wish to bring in a product to demonstrate the types of materials that are viewed as damaging to the ozone such as an aerosol can or a product that contains chlorofluorocarbons.

Main Activity

Say: Let's brainstorm the known causes of the damages to the ozone. Make a chart that lists all the causes that students identify. The chart should list things like chlorofluorocarbons, ferns, aerosols and vehicle and industry pollution. The chart may also include products that may have these things in them. *Ask:* How does damage to the ozone affect your life? In this discussion, things such as more sunlight, stronger sun exposure, increased temperatures on the planet, health hazards such as sunburns or cancer, effects on animal and plant life, etc. should be included.

Closure/Conclusion

Ask: Is there anything that you can do personally to help slow down the depletion of the ozone? Do you currently use products that may damage the ozone? How will knowing about the products that damage the ozone affect the way you use them?

Follow-Up Lessons/Activities

Have the students discuss what the effects might be to earth if the ozone layer is severely damaged and what would the affect be on their own lives.