Post-assessment activity from The Science of Global Atmospheric Change Teacher’s Guide and for Mr. Slaptail’s Curious Contraption

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**ACKNOWLEDGMENTS**

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**SOURCE URLS**

- BAYLOR COLLEGE OF MEDICINE
  - www bcm edu
- CENTER FOR DISEASE CONTROL AND PREVENTION
  - cdc gov/climatechange
- KOEN VAN GORP - ASTRONOMY AND PHOTOGRAPHY
  - www koenvangorp be/events/eclipse_2006 html
- INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE
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- WORLD HEALTH ORGANIZATION
  - who int/global-change/environment
For more than 100 years, human actions have been changing the composition of Earth’s atmosphere. Increases in the levels of heat-trapping greenhouse gases (especially carbon dioxide) and decreases in the amounts of stratospheric ozone both have been measured. These processes have the potential to impact humans in many ways.

This activity is designed to assess student understanding of concepts related to global atmospheric change. Each student will write a persuasive letter about a topic related to protecting the atmosphere.

**SETUP**
Begin with a whole-class discussion, after which students will work individually.

**PROCEDURE**
1. Tell students that they will write persuasive letters to each other related to global atmospheric change. Introduce letter writing skills if needed. Mention that global atmospheric change is a broad category that includes global warming and loss of atmospheric ozone. Also mention that all of us do things every day that contribute to these problems. Each student should try to convince the reader to help protect the atmosphere by changing behaviors to reduce the possibility or impact of global warming or ozone depletion.
2. Review the importance of our global environment to individual health and to the health of the planet. You may use the “Tips for Healthy Living” on page 3 of *Explorations* or pages 34–35 in *Mr. Slaptail’s Curious Contraption*, or a review of the activities in this unit to guide students.
3. Each student should select one issue presented in this unit and write a letter to try to convince someone to help protect the atmosphere.
4. Distribute pre-assessments back to each student. Ask students to examine their answers and, using a different color, to circle new answers based on information they have learned.
5. Discuss students’ changes as a group.

**TEACHER RESOURCES**
Downloadable lessons and supplemental materials on global atmospheric change and other science education topics are available free at K8 Science (www.k8science.org) and BioEd Online (bioedonline.org).