



**ARKANSAS  
DEPARTMENT  
OF EDUCATION**

# **STEM FOUNDATION 3: Writing Across the Content Areas**

**Lesson Title: Global Warming  
English Language Arts Grade 8  
Lesson Plan Handout**

**Teacher Created Materials**  
PUBLISHING

**Lesson Title: Global Warming**  
**Foundation 3: Writing**  
**English Language Arts Grade 8**  
**AETN - Edits**

<b>Arkansas Science Curriculum Framework</b>
Earth and Space Science: HW.7.1.2—Analyze the causes and predict the consequences of global warming on the following: weather; temperature; ocean water levels

<b>English Language Arts Common Core State Standards</b>
W.8.1.b, W.8.1.c, W.8.1.d, W.8.1.e—Write arguments to support claims with clear reasons and relevant evidence. <ul style="list-style-type: none"> <li>b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>d. Establish and maintain a formal style.</li> <li>e. Provide a concluding statement or section that follows from and supports the argument</li> </ul>
W.8.4—Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
W.8.5—With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 8 on page 53.)
W.8.6—Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
L.8.1.b.—Form and use verbs in the active and passive voice.
WHST 8.1.e.—Provide a concluding statement or section that follows from and supports the argument presented.

<b>Crosscutting Concept Addressed</b>
Patterns can be used to identify cause and effect relationships.
Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

<b>Scientific and Engineering Practices Addressed</b>
Ask questions that arise from careful observation of phenomena, models, or unexpected results.
Formulate a question that can be investigated within the scope of the classroom, school laboratory, or field with available resources and, when appropriate, frame a hypothesis (a possible explanation that predicts a particular and stable outcome) based on a model or theory.

## **Information Texts, Documents, & Mentor Texts**

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- *Discovering Science through Inquiry: Ecology and the Environment:*
  - Science Inquiry Cards 1, 7, 10, 11, 12, 13, and 16
- *TIME for Kids Nonfiction Readers: Hand to Earth: Saving the Environment*
- *Exploring Writing Secondary:*
  - Argument Cards 4 and 5
  - Expository Cards 5, Bonus
- *Exploring Nonfiction Secondary Science:*
  - Earth and Space Science Card 11
- *Writer's Notebook: Level D*
- "Global Warming: We Offer Solutions" by Chris Clementi
- Environmental Protection Agency Global Warming Video (beginning at 02:35)

## **Materials**

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- Projector
- Screen
- Speakers
- Sticky notes
- 11x17 Paper
- Sponge
- Balloons
- Envelopes
- Word Cards and Definitions

## **Writing Across the Curriculum**

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- **Prewrite:**
  - Review experiment, Introduce Inquiry Cards, and vocabulary
  - *Think Sheet* during lecture and discussion (w/ teacher guided questions)
  - *Information Map* with *Polar Bear Problem* reading, *Hand to Earth* reading, Inquiry Cards
- **Drafting:**
  - Introduce Rubric
  - RAFT Graphic Organizer
  - Use mentor text to model the writing task
- **Revising:**
  - Concluding Statement; Call to Action; Writer's Notebook Call to Action Lesson, Use Exploring Writing Cards to show exemplar text of Call to Action writing, Introduce Peer Editing Rubric Post-it Note; Students revise conclusions using long post-it strips
- **Peer Editing:**
  - Post-it note rubric focus on Conclusion and Call to Action
- **Editing:**
  - Active Voice lesson from Writer's Notebook, Play Get Active!, Editing for Active Voice
- **Publish:**
  - Individually students will create a brochure using a word template

## **Objectives**

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The students will participate in a whole group, small group, and individual investigation of science text to design and communicate solutions that meet criteria and constraints for minimizing human impacts on the environments and local landscapes by: 1. managing water resources, 2. reducing pollution, 3. reducing the release of greenhouse gases. They will learn there is something called Global Warming, investigate causes, and brainstorm solutions.

This lesson is based upon the writing process model utilizing the five step process to include; prewriting, drafting, revising, editing, and publishing.

## **Essential Questions**

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What are the causes of global warming? What are the effects of global warming? What can we do to solve the problem?

## Procedures

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### Pre-Shoot – Show EPA Video to students

### BUILD BACKGROUND – At Desks

1. Review standards and objectives for the lesson.
2. Introduce students to the Global Warming: Think Sheet from Writing Strategies for Science pg 53. Students will record observation, information, and facts. Read the Think Sheet essential questions with the students (i.e., *What is global warming? What causes global warming? What are the effects of global warming? What are solutions to stop/curtail global warming?*). These are the essential questions that you will need to answer.

Name: _____	
Global Warming: Think Sheet	
Directions: During the science lesson write answers and information.	
Teacher Questions	My Questions/Thoughts
What is global warming?	
What causes global warming?	
What are the effects of global warming?	
What are solutions to prevent/curtail global warming?	
©2013 Writing Strategies for Science ©2013 Education	

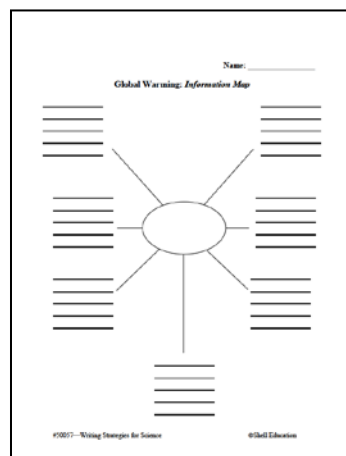
3. Students will each blow up a balloon to simulate greenhouse gases and the “ozone layer” surrounding the Earth. Using a sponge the instructor will demonstrate the permeability of the layer surrounding the Earth.
4. Instructor will deliver the Greenhouse Effect lesson from *Discovering Science through Inquiry: Ecology and the Environment*, (pages 126–127 of the Teacher’s Guide). Students will take notes and write down their thoughts or questions on the Think Sheet during the lesson.
5. To ensure understanding of the vocabulary words that have been introduced thus far in the lesson, the students play a game where they match the words to their definitions.
  - Vocabulary Words: atmosphere, carbon dioxide, carbon footprint, fossil fuels, greenhouse gases, methane.

# PREWRITE

1. The instructor will introduce the students to the Information Map graphic organizer. Students will work in small groups to add information to the Information Map.
2. The instructor will model deriving information from text by using the power point demonstration taken from the *Discovering Science through Inquiry: Ecology and the Environment* Rising Water lesson.

Global warming is a threat to plants. It is a threat to animals and humans. It is also a threat to entire islands and other coastal areas. **Rising ocean water can cover entire islands.** This is a problem for people that live on these islands. They **lose their homes.** Their way of life is changes forever. This has already happened in India. The island of **Lohacharia** is underwater. This land was home to **10,000 people.** Other islands may become covered with water soon. The problem of global warming is very real for these island residents.

3. In small groups, students will use highlighters to identify text from the passage that helps to answer the essential questions.
4. Students will independently read the leveled text Polar Bear Problem from *Discovering Science through Inquiry: Ecology and the Environment*. Students will use highlighters to identify information in the text that helps them to answer the essential questions.
5. After reading Polar Bear Problem students will work as table groups to complete one 11x17 enlarged version of the Information Map. Students will add information to the Information Map using sticky notes.



6. When Students complete this task they will be asked to read and draw relevant evidence from *Hand to Earth: Saving the Environment* individually until all groups have completed their Information Map.
7. The students will watch the EPA video, Global Warming, and use this video as a tool to continue to answer the essential questions and find relevant evidence.

## Shared Drafting

1. The instructor will introduce the students to the RAFT graphic organizer in a poster size.

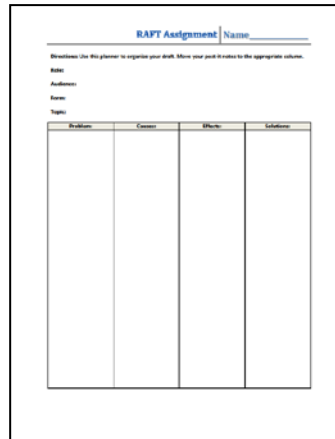
**Role:** Concerned human on Earth posing an argument to decrease Global Warming

**Audience:** General public; readers of newspapers/brochures

**Format:** Newspaper/Brochure

**Topic:** Global Warming: Causes and Solutions

2. The instructor will conduct a “shared reading” of the brochure Global Warming: We Offer Solutions.



The image shows a graphic organizer titled "RAFT Assignment" with a line for "Name". Below the title, it says "Directions: Use this planner to organize your draft. Move your post-it notes to the appropriate column." There are four columns labeled "Problem", "Causes", "Effects", and "Solutions". Above each column is a label: "Role:" above Problem, "Audience:" above Causes, "Format:" above Effects, and "Topic:" above Solutions. The columns are empty for student input.

3. The class will work with the teacher to identify the role, audience, format, and topic for their global warming brochures.
4. The students will then work at their tables to categorize their sticky notes from the Information Map into four categories: problem, causes, effects, solutions.
5. Students will share their information graphic organizers with the class, and the teacher will summarize.

## Independent Draft

1. The instructor will introduce the rubric and the peer editing form.
2. The students will draft their own global warming brochure using the information on their Think Sheet, the vocabulary word wall, the shared information map, and supportive text.
3. The instructor will conduct over-the-shoulder mini conferences while the students draft.

## Revise

1. Using the *Writer's Notebook: Level D* Call to Action Lesson and Exploring Writing Cards to show exemplar text demonstrating strong Call to Action writing, the instructor will teach a mini-lesson on Call to Action conclusions. Discuss
2. Students will revise their drafts for Strong Conclusion.
3. Using mentor text students will be directed to read and identify strong call to action.



# Peer Editing

## Mini-Lesson

### 1. Introduce Peer Editing Rubric Sticky Note

<p><b>Argument Writing</b> Peer Review Read 1-5</p> <p>...The introduction and conclusion grab the reader and set up the argument.</p> <p>...There is a consistent tone about the topic throughout the writing.</p> <p>...The choice of specific facts and details strengthens the argument.</p> <p>...Transitions help the reader know where new ideas begin and end.</p> <p>The "Call to Action" is relevant &amp; detailed.</p>	<p><b>Argument Writing</b> Peer Review Read 1-5</p> <p>...The introduction and conclusion grab the reader and set up the argument.</p> <p>...There is a consistent tone about the topic throughout the writing.</p> <p>...The choice of specific facts and details strengthens the argument.</p> <p>...Transitions help the reader know where new ideas begin and end.</p> <p>The "Call to Action" is relevant &amp; detailed.</p>
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- Students will exchange papers with a peer to receive feedback on their writing with an emphasis on Call to Action conclusions.

## Edit

- Instructor will deliver the Active Voice lesson from *Writer's Notebook: Level D*. The class will play the power point delivered game, Get Active!, as a whole group.
- Students will then review their drafts to edit for Strong Voice.
- The instructor will conduct over-the-shoulder conferences during this time.

## Publish

- After students have conferenced with the instructor, they will publish their work in the word template on class computers.

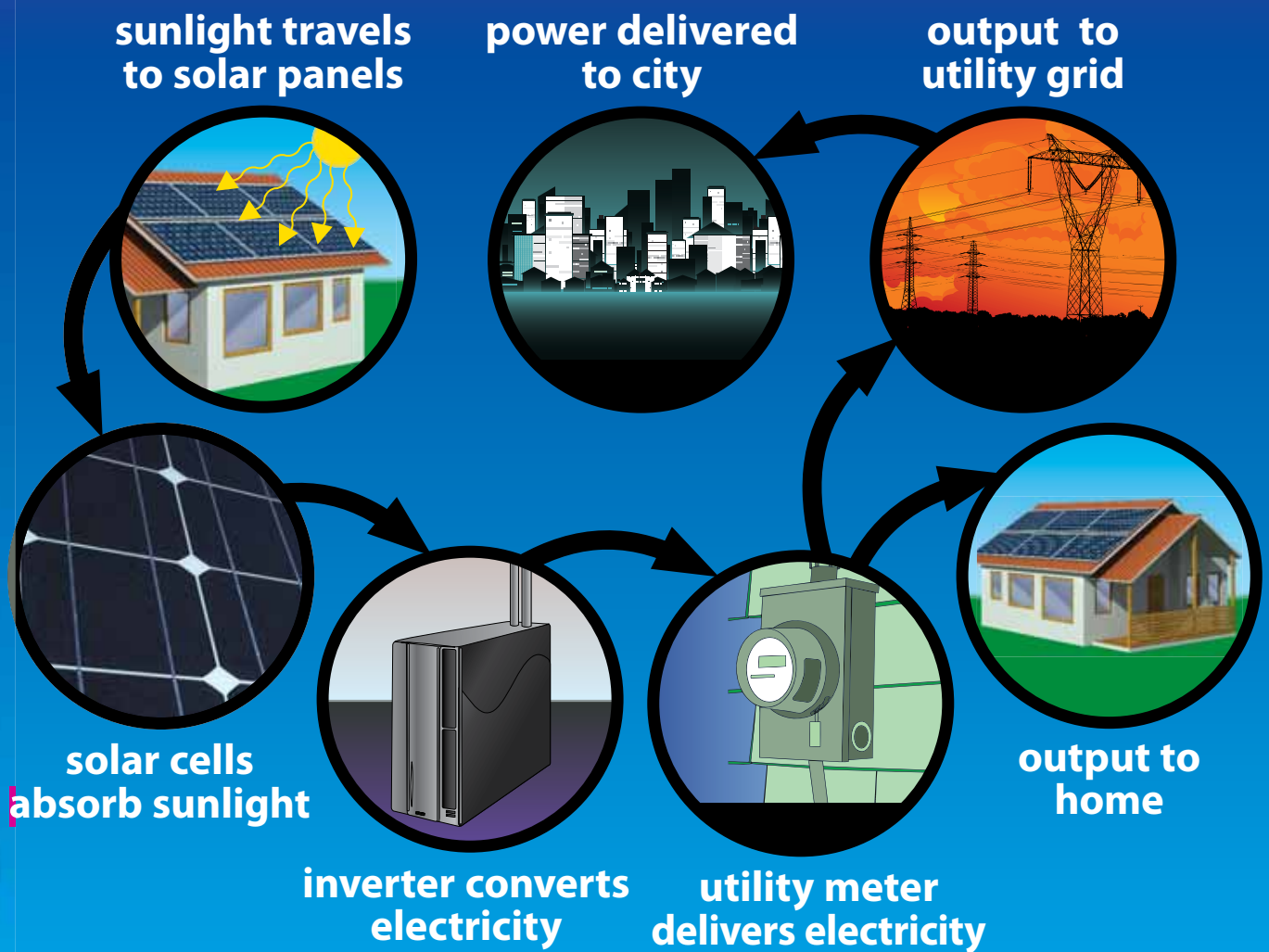
<p><b>Definition</b></p> <p>This is a good place to briefly, but effectively, summarize your products</p>  <p>or services. Sales copy is typically not included here.</p>	<p><b>Websites</b></p> <p>Product/Service Information</p> 
<p>Student Information</p> <p>YOUR LOGO HERE</p>	

# Lesson 1





## POWERED BY SOLAR ENERGY





# Lesson 10

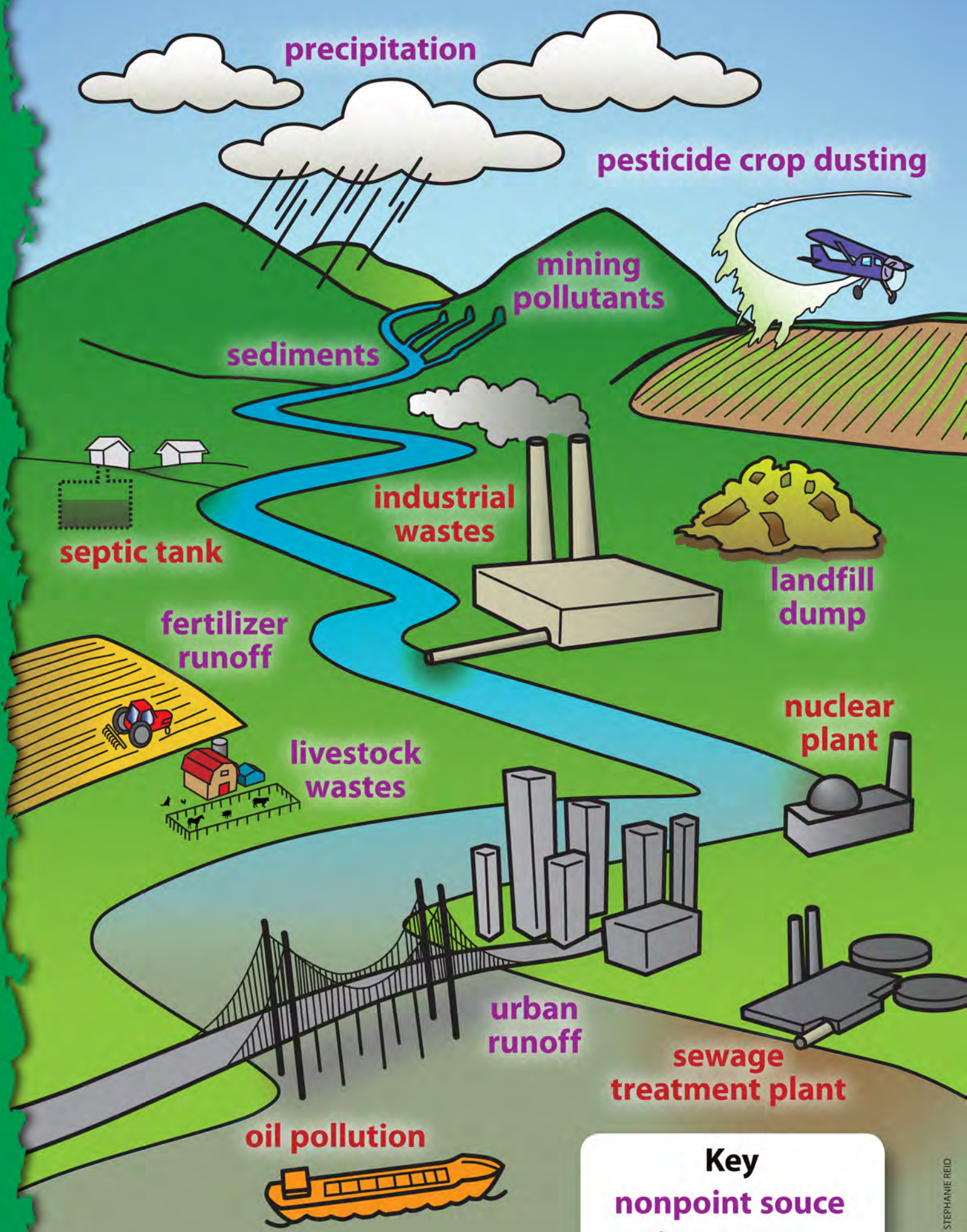


LOS ANGELES, CA. BRIAN WEED/SHUTTERSTOCK



MARKKU VITIKAINEN/SHUTTERSTOCK





**Key**

nonpoint source

point source



**Solar radiation travels towards Earth's surface.**

**Some of the solar radiation is reflected back into space.**

**Some solar radiation passes through the atmosphere.**

**Some of the solar radiation is trapped by greenhouse gases and is bounced back to Earth's surface.**

**Some solar radiation bounces off Earth's surface and travels back into space.**

**Some solar radiation is absorbed by Earth's surface. It warms the planet.**

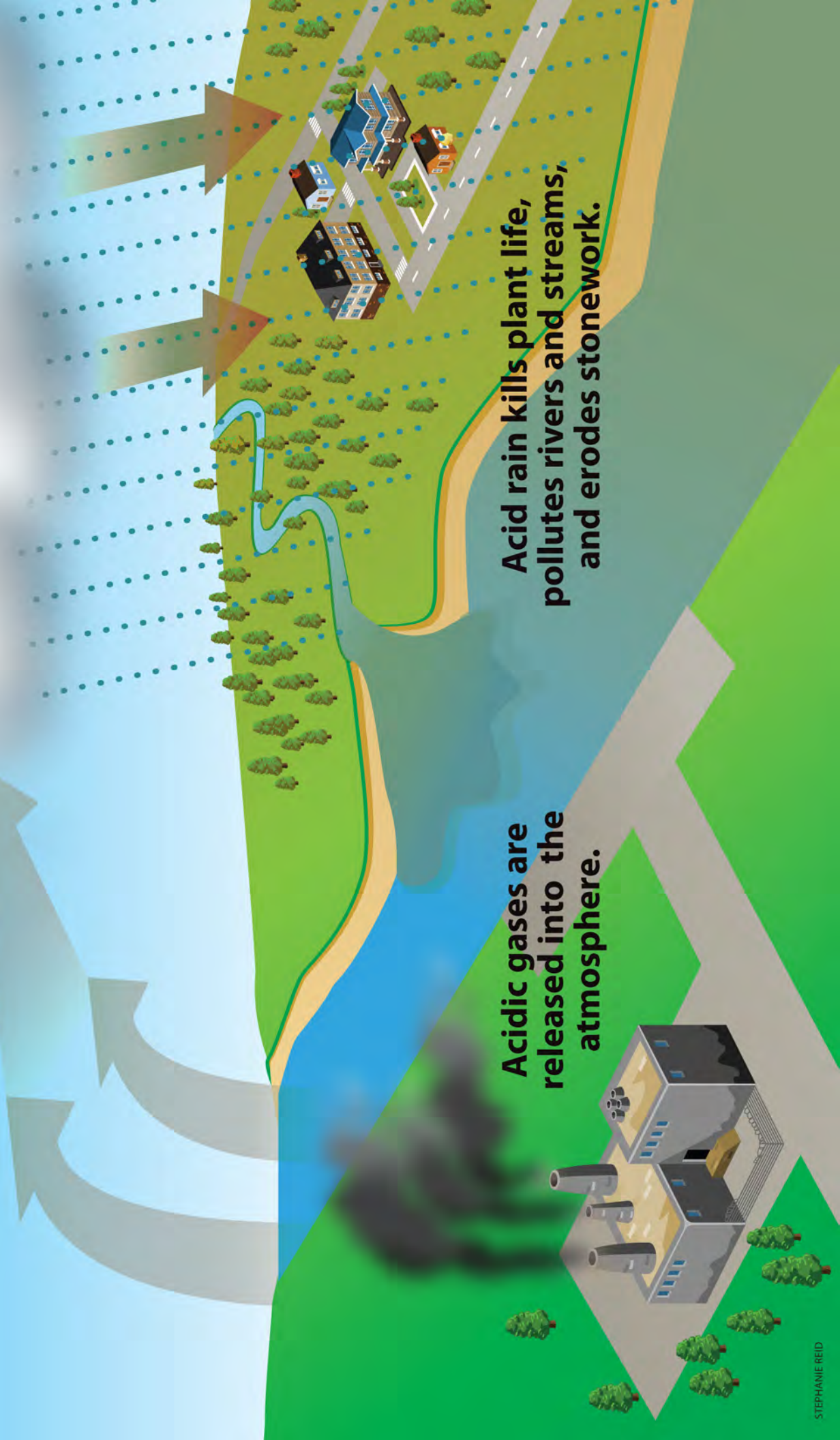
# Lesson 13

**Gases are  
carried by wind.**

**Gases dissolve in rainwater  
to form acid rain.**

**Acidic gases are  
released into the  
atmosphere.**

**Acid rain kills plant life,  
pollutes rivers and streams,  
and erodes stonework.**







# Help Conserve Our Planet!



**Recycle paper,  
glass, metal, and  
plastic.**



**Turn off the  
lights when you  
leave a room.**



**Turn off the faucet  
when brushing  
your teeth.**



**Take a  
shower instead  
of a bath.**



**Use energy-  
efficient light  
bulbs.**



**Bring your  
own bags to  
the store.**



### Reader's Response

- 1 How do people harm water supplies directly? How do they cause changes to water supplies indirectly?
- 2 Give an example of a local group working with an international group to improve water supplies for a community. Is this a good model to follow? Support your answer with details from the article.
- 3 Are the solutions described in the article long-term fixes to the global water problem? Why or why not?

### Writer's Response

- 1 Describe the organization of this article. Is this an effective way to organize an article? Explain.
- 2 How do the anecdotes add to the article?
- 3 How do the maps and other visual aids help readers understand the information? What other graphics could be used for this article? Where would you place them?

### Be the Writer

Imagine that you live in one of the places described in the article and you are on a committee to educate your community about improving and protecting the water supply. Plan a public-awareness campaign. You might sketch posters, write a brief speech or series of public-service announcements, prepare illustrated brochures, or plan activities that will get the word out effectively.

### Words to Know

**contaminate** **refuse**  
**sanitation** **receptacles**

### From the Writer

Your mission as an expository writer is this: to explain something so that your readers can understand it better. This requires that your information be presented in as clear and as reasonable a way as possible. Good writers keep this in mind from the very beginning, even while researching.

Focusing the topic is key. Some writers try to cast their nets wide to make sure they get enough information. The problem with this approach is that you may get far more information than you know what to do with! This writer chose a narrow topic: how problems with the water supply affect people. This topic still produces a lot of information, but it isn't overwhelming to either the writer or the reader.

Organizing the information carefully helps the writer write, but it also ensures that the finished product will have a logical flow. Are there groups of details that belong together to help make specific points? "Water Troubles" uses anecdotes to show different problems and solutions. The main theme—that people depend on their water supplies and have a responsibility to protect them—is highlighted by the careful arrangement of details.

Expository writers consider not only how to present information in words, but also how the text can be made better with visuals. Maps, photographs, graphs, and diagrams can make an article more appealing to a reader. The visuals can also help present important or complicated information in a more understandable way. The result is that readers "get" what the writer explains. Mission accomplished!

# Water Troubles

Earth's most valuable resource is at risk. Can we keep it flowing?

Until recently, Cormelia Gogu, 12, and other students in a small town in Romania didn't have any clean water at their school. Old, rundown pipes made it dangerous for kids to drink the water or even wash their hands. When kids did use the water, it made them sick.

These days, things are better at Cormelia's school. A Romanian aid group, working with the U.S.-based Earth Day Network, has rebuilt the school's pipes and bathrooms. "Now we can drink water during our breaks," Cormelia says. "We can wash our hands."

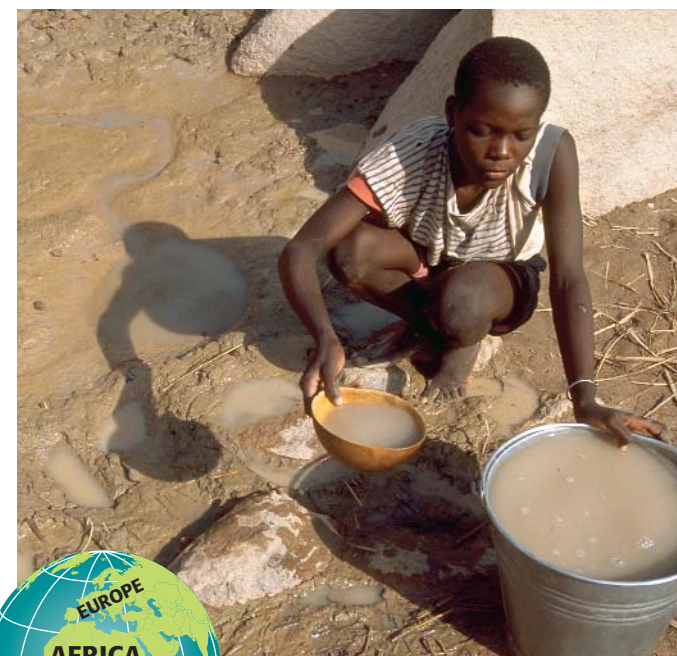
### Water for Life

In some parts of the world, all you have to do to get clean water is turn on the tap. A simple turn of the faucet gives us gallons of clean, fresh water. But like many people around the world, Cormelia knows that water is a precious gift. Eighty of the world's 193 countries suffer from serious water shortages. That's as much as two-fifths of the world's population. The problem is greatest in the developing nations of Africa, Asia, and Latin America. But other countries are beginning to face water shortages, also. For example, in parts of the U.S. West and Southwest, water supplies are in danger of being used up.

The United Nations, the World Health Organization, and other international groups are working hard to do something about this situation. They are trying to protect the world's freshwater supplies and deliver it to those who need it most. The groups are digging wells and building new

water systems for some of the world's poorest communities. Still, 1.1 billion people lack access to safe drinking water. Aid groups hope to cut that number in half by 2015.

Rose Mbwawa, 11, lives in the village of Mbabala in Tanzania, a nation in Africa. Although Mbabala is only a 30-minute drive from Tanzania's capital, until recently the people there did not have a modern, clean water system. The only source of water was an open well, basically a hole in the ground. People obtained their water by lowering buckets into the well on ropes. The well had no cover, so dirt and garbage could fall into the water and **contaminate** it.



**GHANA** It took this girl three hours to collect her water, which is not safe to drink.

CAROLINE PENN—WATERAID

Then WaterAid stepped in. The organization helped locals build four new wells in Mbabala. The new wells are all capped with hand pumps. That means the water is protected from outside dirt and garbage. All it takes is a few gentle pushes on the pump handle to get clean water out of the spout. This simple change has made a tremendous difference in the lives of people like Rose Mbwawa.

"Every day I get up and have a wash, brush my teeth, do some cleaning around the home, and then go to school," she says. "After school, I go to collect water for my family. In the old days, everything was terrible. We all got sick because of





**PAKISTAN** In rural areas, women and children often walk miles to collect water. The parched country is suffering from many years of drought.

As a result of the project, illness rates in Mabuia dropped almost to zero. And there was an added bonus—many girls who used to spend all day fetching water could now go to school. Today, Fatima happily watches her son Fernando, 13. “By the time Isabel was Fernando’s age, she had been sick a dozen times,”

dirty water. But now that we’ve got clean water, it’s much better. People do not get ill now.”

## Water or Crocodiles?

For the people of Mabuia, in the African nation of Angola, the problem wasn’t an open well. It was the crocodiles in the river. It took hours to walk to the river, and then you had to watch for the crocs as you filled your jugs or buckets. One year, seven children were attacked while collecting water. Still, they had no choice; it was face the crocodiles or go without water.

However, even when the water carriers made it back to the village safely, there was another problem. The water from the river was polluted and carried disease-causing germs. Many people were sick from drinking it, especially children who suffered from severe diarrhea. Many died.

In 1999, tragedy struck the family of Fatima Kituxi. Her daughter Isabel died as a result of disease caused by the drinking water. “Isabel was always sick, she could just never get strong,” Fatima says.

In 2000, UNICEF, along with the Angolan government, built a pipeline bringing water to Fatima’s village. A filtering system keeps the water clean. Besides tap water, the project also included new bathrooms or latrines. Safe disposal of human waste is an important part of keeping water supplies clean.

Fatima says. “This boy has never once had diarrhea. Not once.”

## Refreshing News

The planet’s water problems can be solved, Mansoor Ali says. He is UNICEF’s senior adviser for water, the environment, and **sanitation**. But it will not be easy to satisfy the world’s thirst. “It’s going to take some major changes in how we think about water,” he says, “and how we value, manage, and use water.”

It will also take more work by international aid groups and governments. The village of Piedras Grandes, Nicaragua, is a good example of positive



**EAST TIMOR** UNICEF is helping to install clean-water systems and hand pumps, like this one, in the country’s poorest villages.



**TANZANIA** The country has been in a drought for three years. Water once flowed where these women stand.

cooperation among groups and government. Until 2002, a nearby river in this Central American country was the only source of drinking water. That was the year people in the town formed a Drinking Water and Sanitation Committee. The committee was made up of people from 15 households. Together, and with help from UNICEF and the Nicaraguan government, they built a new well in the town. They also set out to improve health standards through education.

Maria Dolores Ocón, 16, is one of the volunteers who works for the committee. “We make door-to-door visits every two weeks,” she says. “We see that the households are keeping their backyards clean, using their latrines well, burning and burying their **refuse**, and eliminating pools of water where mosquitoes might breed. We also check that **receptacles** containing water are

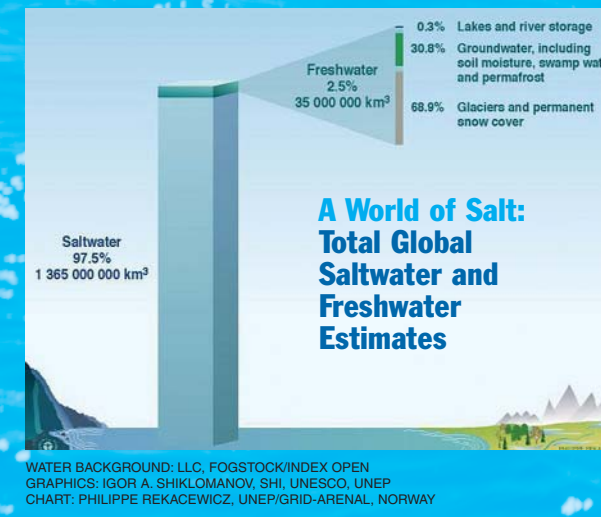


**SOUTH AFRICA** This wheel is a fun way to collect water. As kids spin the wheel, it pumps clean water to a nearby tap.

## Where Is The Water?

Earth is about 75% water, but most of that is salty water in the world’s oceans. Only about 3% of the water in the world is freshwater, and most of the freshwater in the world is frozen in ice caps and glaciers. So only about 1% of the water in the world is available for human use. Sadly, we’re draining this usable water at an alarming rate. We’re also harming water sources with chemicals and pollutants.

At the same time, water use is rapidly increasing. Over the last century, water use increased at twice the rate of the world’s population. All over the world, there are areas where wells are being drained faster than they can be refilled. There are only a few things that can be done. Precious water resources, like aquifers (water in the ground) have to be protected from pollution and overuse. People have to learn to conserve water, even in countries where there has always been enough.



covered to avoid contamination, and that empty ones are cleaned out.”

Thanks to the new well and the efforts of young people like Maria, life in Piedras Grandes has changed for the better. The villagers now have clean water, and they are learning to stay healthy. In just a short time, these simple measures have brought the number of childhood illnesses way down.

Projects like the one in Piedras Grandes or Cormelia Gogu’s school in Romania show that progress can be made. It is possible to bring clean water to people everywhere, if local groups and international aid groups work together, and if they have support from people around the world. With these efforts, it’s possible that someday everyone will be able to get clean, fresh water with just a turn of the tap.



# SWEATSHOPS MUST STOP

**H**ow much are you willing to pay for a sweater or a pair of sneakers? Of course we're all happy when we get a bargain at the mall. But would you be as happy if you knew the price included accidents and death for the workers who made them?

In June 2005, rescue workers needed a week to dig out bodies after a **garment** factory collapsed in Bangladesh. At least 80 people died, and 100 were seriously injured. The factory had a contract to make sweaters for two European companies whose products are sold around the world.

Disasters like this one are a tragedy for the workers. They are also a nightmare for the many companies that employ workers in poor nations to make goods for **consumers** in richer nations. Yet the nightmare doesn't seem to be enough to stop them. The problem, of course, isn't that they give jobs to people in poorer countries. We're all for that. The problem is that the working conditions in those poor countries are often much worse than in the companies' home nations.

In fact, corporations often choose to build or rent factories in places where there are weak health and safety laws, no unions, and low wages. These

companies save on costs and can sell their goods more cheaply around the world. The people who pay the real price are the sweatshop workers who work in poor conditions.

More than 90% of computers, digital cameras, and cell phones are produced by low-paid workers in Asia. For example, the computer-chip maker Intel **employs** nearly 20,000 people in Malaysia, China, the Philippines, and Costa Rica.

Often, international companies will make deals with local factories to produce their goods. Those local suppliers aren't bound by any laws. So factories can become sweatshops—where workers **toil** under terrible conditions for low wages.

Yet there are some signs of progress in the fight against sweatshops. Companies such as Nike and the Gap know they need to protect their good name among consumers. In recent years, both of these companies have adopted new policies. They send their own inspectors to monitor their local suppliers. They try to enforce rules about safety, overtime pay, and human rights.

We think these companies are doing the right thing. And studies have shown that suppliers who respect workers' rights get better quality goods from their employees. It's time for consumers to get educated about sweatshops. Find out which companies respect the rights of workers and which don't. Then buy from those who treat workers fairly. You'll find that's the best deal of all.

AP PHOTOS

A sweatshop in Guatemala (below left) and a cleaner factory in Vietnam (below right)



# Lacrosse Is the Cool Sport

Dear Susie,

I know you're going into high school this fall. It will be a big change from middle school. I bet you're excited and a little nervous, like I was. That's why I'm writing. I have an idea that might make your first year easier and even fun. I think you should go out for lacrosse.

You know I've been playing lacrosse for the last two years here at Glenfield High. I wanted to tell you that going out for lacrosse is one of the best things I've ever done. Besides getting in the best shape ever, I've made good friends on the team, and I'm having a lot of fun.

Lacrosse has a lot going for it that other sports don't. First of all, almost anyone can play lacrosse. You don't have to be tall or big. You do have to be fast, though not as fast as a track star. The main thing you have to do is build up your **endurance**.

You also have to learn to use the stick. Stick handling does take some practice, but once you learn, it becomes **second nature**. Also, the sticks are cool. Girls' sticks come in different colors now. I have to admit I like walking around with my lacrosse stick in school.

The second thing about lacrosse that's great is that it's a team sport. I don't know why, but

lacrosse players just seem to have a great spirit. Everyone is very welcoming, and everyone helps each other. Unlike other sports, you don't get stuck in one position. The coaches are always moving people around.

The game itself is a great mix of speed and action. It's got constant motion like basketball or soccer. It's also kind of like field hockey, but the action is faster. The equipment is cheaper than ice hockey, and you don't have to go to a chilly rink to practice.

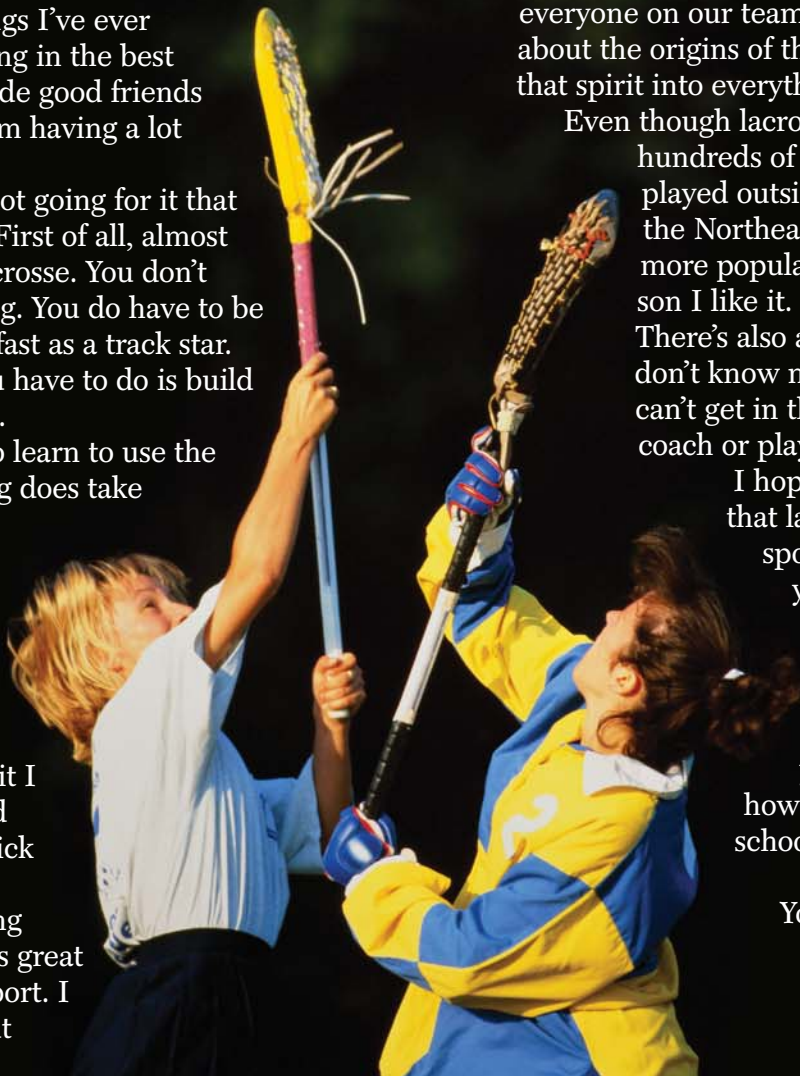
My coach says that one reason lacrosse is so great is because of its history. It was invented and played by Huron and Iroquois Indians in the Northeast. They used to play on big fields with no boundary lines and their games could last several days. The game was considered a gift from the Creator. Games were used to settle **disputes** between tribes, or as a ceremony to assure a good harvest. Like a lot of lacrosse players, everyone on our team has taken time to learn about the origins of the sport. We try to carry that spirit into everything we do.

Even though lacrosse has been around for hundreds of years, it was hardly ever played outside of a few schools in the Northeast. Now it's becoming more popular. I think that's one reason I like it. It's new and different. There's also an added bonus—parents don't know much about it so they can't get in the way and try to tell the coach or players what to do.

I hope I've convinced you that lacrosse is the greatest sport around. If I haven't, you could always go to a game at school and see for yourself. Even if you don't want to play, you'll still enjoy yourself. Let me know how the first days of high school go for you.

Your friend,

*Lizzie*



AMWELGETTY IMAGES



# SWEATSHOPS MUST STOP

**H**ow much are you willing to pay for a sweater or a pair of sneakers? Of course we're all happy when we get a bargain at the mall. But would you be as happy if you knew the price included accidents and death for the workers who made them?

In June 2005, rescue workers needed a week to dig out bodies after a **garment** factory collapsed in Bangladesh. At least 80 people died, and 100 were seriously injured. The factory had a contract to make sweaters for two European companies whose products are sold around the world.

Disasters like this one are a tragedy for the workers. They are also a nightmare for the many companies that employ workers in poor nations to make goods for **consumers** in richer nations. Yet the nightmare doesn't seem to be enough to stop them. The problem, of course, isn't that they give jobs to people in poorer countries. We're all for that. The problem is that the working conditions in those poor countries are often much worse than in the companies' home nations.

In fact, corporations often choose to build or rent factories in places where there are weak health and safety laws, no unions, and low wages. These

companies save on costs and can sell their goods more cheaply around the world. The people who pay the real price are the sweatshop workers who work in poor conditions.

More than 90% of computers, digital cameras, and cell phones are produced by low-paid workers in Asia. For example, the computer-chip maker Intel **employs** nearly 20,000 people in Malaysia, China, the Philippines, and Costa Rica.

Often, international companies will make deals with local factories to produce their goods. Those local suppliers aren't bound by any laws. So factories can become sweatshops—where workers **toil** under terrible conditions for low wages.

Yet there are some signs of progress in the fight against sweatshops. Companies such as Nike and the Gap know they need to protect their good name among consumers. In recent years, both of these companies have adopted new policies. They send their own inspectors to monitor their local suppliers. They try to enforce rules about safety, overtime pay, and human rights.

We think these companies are doing the right thing. And studies have shown that suppliers who respect workers' rights get better quality goods from their employees. It's time for consumers to get educated about sweatshops. Find out which companies respect the rights of workers and which don't. Then buy from those who treat workers fairly. You'll find that's the best deal of all.

AP PHOTOS

**A sweatshop in Guatemala (below left) and a cleaner factory in Vietnam (below right)**



## Online Resources

- **Fight Global Warming:**  
<http://www.fightglobalwarming.com/page.cfm?tagID=136>
- **Fight Global Warming:**  
[http://www.fightglobalwarming.com/](http://www.fightglobalwarming.com/Geography for Kids:)  
**Geography for Kids:**  
[http://www.geography4kids.com/files/atm\\_greenhouse.htmlpage.cfm?tagID=135](http://www.geography4kids.com/files/atm_greenhouse.htmlpage.cfm?tagID=135)
- **Take Global Action:**  
[http://www.stopglobalwarming.org/s gw\\_actionitems.asp](http://www.stopglobalwarming.org/s gw_actionitems.asp)
- **The Great Warming:**  
<http://www.thegreatwarming.com/index.html>
- **The Science Museum:**  
<http://www.koshland-science-museum.org/exhibitgcc/index.jsp>

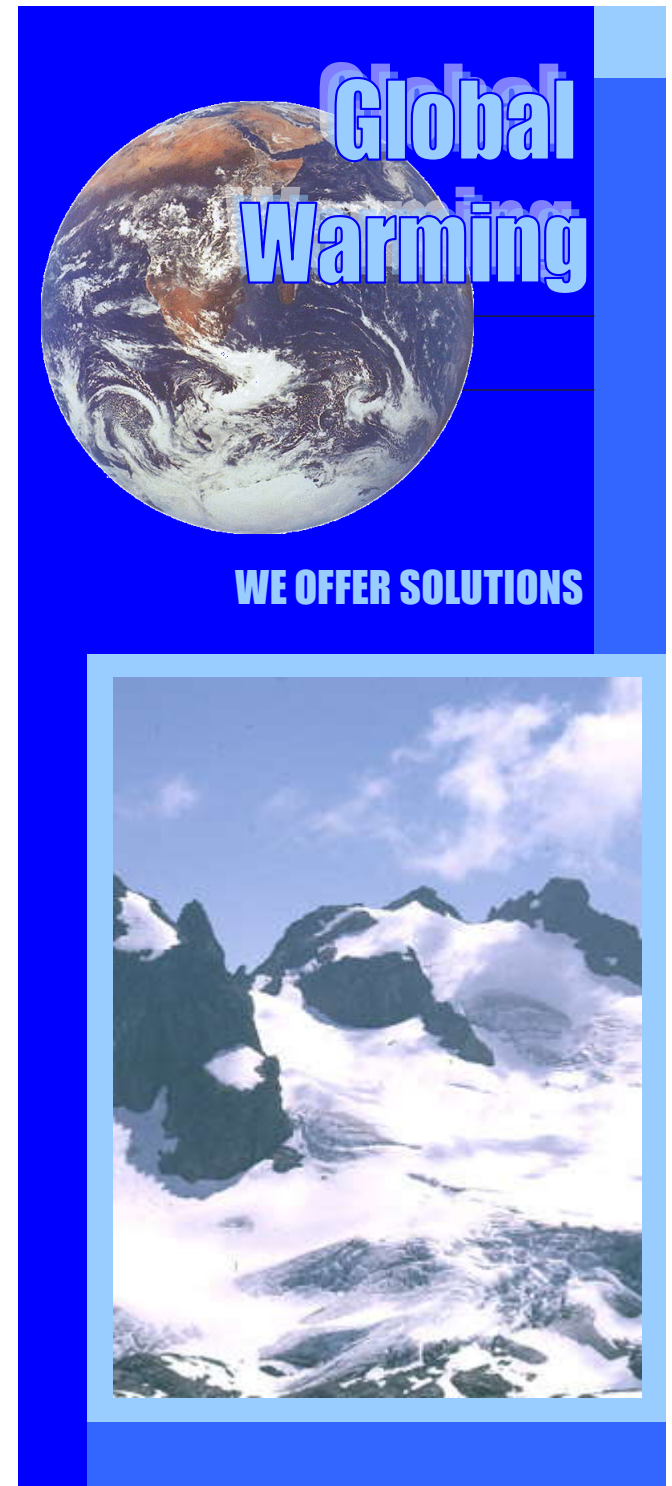


## About the Brochure

Ms. Clementi is a computer teacher that is dedicated to helping students learn how to use various applications while learning content. The purpose of this brochure is to provide students an example of brochure expectations as it provides readers solutions to environmental problems.



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## The Problem



Global warming refers to an increase in the average temperature of the earth's atmosphere. Many believe,

based on substantial evidence, that global warming is occurring because of human activity. The burning of fossil fuels, a non-renewable source of energy, is leading to the intensification of greenhouse gases. When fossil fuels are burned, greenhouse gases such as carbon dioxide are released into the atmosphere. The fossil fuels we burn to run our cars, trucks, factories, planes and power plants add to the natural supply of greenhouse gases.



## Solutions



### Cars:

The car you drive can make a huge difference on impacting

global warming. It is recommended that people drive cars that get at least 35 miles to the gallon. Did you know that an average car produces 35 pounds of carbon dioxide every day! There are other things you can do to help the environment when it comes to cars. Did you know that if you keep your tires inflated, you can save over \$700 in gas a year?



### Buy Locally:

Purchasing food from places far away contributes to greater emissions of greenhouse gases. Did you know that the

average product will travel as much as 1,200 miles to get to its final destination. If you purchase locally, you can significantly reduce the emissions of greenhouse gases, helping to alleviate the need to use fossil fuels just to get a pineapple on your table.

## More Solutions



### Light Bulbs:

Light bulbs can contribute to global warming pollution. There are energy

efficient light bulbs that you can use that will significantly contribute to a less polluted world. Did you know that by changing your 75 watt bulb to a compact fluorescent light, you can cut approximately 1,300 pounds of global warming pollution? They may cost more, but they last up to 15 times as long as a regular bulb and they save money.



### Showers and Water:

Taking shorter showers and using less water can contribute to a healthier environment in several ways.

By taking shorter showers and using less water, you conserve on water and fossil fuel consumption. Creating hot water requires the use of fossil fuels to heat the water unless you are using solar energy. This is just another way we can do our part in creating a healthier world.

Global warming is a threat to plants. It is a threat to animals and humans. It is also a threat to entire islands and other costal areas. Rising ocean water can cover entire islands. This is a problem for people that live on these islands. They lose their homes. Their way of life is changes forever. This has already happened in India. The island of Lohacharia is underwater. This land was home to 10,000 people. Other islands may become covered with water soon. The problem of global warming is very real for these island residents.



Name: \_\_\_\_\_

## Global Warming: *Think Sheet*

**Directions:** During the science lesson write answers and information.

Teacher Questions	My Questions/Thoughts
What is global warming?	<div><b>Global warming</b> is the rise in the average temperature of Earth's atmosphere and oceans.</div>
What causes global warming?	
What are the effects of global warming?	
What are solutions to prevent/curtail global warming?	

RAFT Assignment

Name\_\_\_\_\_

**Directions:** Use this planner to organize your draft. Move your post-it notes to the appropriate column.

**Role:**

**Audience:**

**Form:**

**Topic:**

Problem:	Causes:	Effects:	Solutions:

Name: \_\_\_\_\_

## Global Warming: *Information Map*

The diagram consists of a central oval. Eight lines radiate from the oval to eight sets of horizontal lines for notes. The sets are arranged as follows:

- Top-left: 5 lines
- Top-right: 5 lines
- Middle-left: 5 lines
- Middle-right: 5 lines
- Bottom-left: 5 lines
- Bottom-right: 5 lines
- Bottom-center: 5 lines

<p style="text-align: center;"><b>Argument Writing</b> Peer Review Rank 1-5</p> <p>___ The introduction and conclusion grab the reader and sum up the argument.</p> <p>___ There is a consistent tone about the topic throughout the writing.</p> <p>___ The choice of specific facts and details strengthens the argument.</p> <p>___ Transitions help the reader know where new ideas begin and end.</p> <p>___ The “<b>Call to Action</b>” is relevant &amp; skillful.</p>	<p style="text-align: center;"><b>Argument Writing</b> Peer Review Rank 1-5</p> <p>___ The introduction and conclusion grab the reader and sum up the argument.</p> <p>___ There is a consistent tone about the topic throughout the writing.</p> <p>___ The choice of specific facts and details strengthens the argument.</p> <p>___ Transitions help the reader know where new ideas begin and end.</p> <p>___ The “<b>Call to Action</b>” is relevant &amp; skillful.</p>
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