

**Earth Day Network  
and the  
Environmental Education Program**

Founded by the organizers of the first Earth Day in 1970, Earth Day Network's (EDN) mission is to broaden the environmental movement worldwide and to educate and mobilize people, governments, and corporations to take responsibility for a clean and healthy environment. EDN works in 174 countries with more than 12,000 network members helping to build alliances, and facilitating information exchange and collaboration. In addition, EDN supports a network of 85,000 K-12 environmental educators, providing them with supplemental materials, classroom and community activities, and opportunities for civic learning and participation.

For more information, please visit Earth Day Network's Web site at [www.earthday.net](http://www.earthday.net). For additional information concerning EDN's Environmental Education Program and to download educational lessons and resources, visit the Teacher's Corner of EDN's homepage.



[www.earthday.net](http://www.earthday.net)

## Environmental Jeopardy

### *Your Local Environment*

Earth Day Network (EDN) is happy to present the third edition of *Environmental Jeopardy*. EDN's Environmental Education Program creates and promotes many valuable classroom resources and lessons, like *Environmental Jeopardy*, designed to encourage civic responsibility and environmental awareness in students of all ages. Make sure you visit the Educators Network by going to the "Teachers Corner" of EDN's Web site, [www.earthday.net](http://www.earthday.net), to see other editions of Environmental Jeopardy as well as other innovative and engaging resources and lessons that help teachers bring environmental issues into a variety of subject areas and grade levels. All of EDN's materials are free to download and easy to use in your educational setting.

The theme for the third edition of *Environmental Jeopardy* is "Your Local Environment." The purpose of the questions is to get students thinking about the major issues that affect their community and how their lifestyle can have a global impact. As a supplement to these issues, students may want to take the *Ecological Footprint* or *Bobbie Bigfoot Ecological Footprint Kids Quiz*, both available on the EDN website. The categories for the third edition cover urban and rural issues, local resources, the global impacts of local decisions, and ways to empower the environment.

*Environmental Jeopardy* is easy to implement in your classroom. Simply download and print out the questions most appropriate for the grade level you teach. You will need Adobe Acrobat Reader and we strongly suggest that you print the questions double-sided. This way the point value will show on one side of the card and the question and answer on the other. If you do not have the capability or are unsure how to print double-sided, you can save this document to a CD, floppy disk, or USB drive and take it to the nearest copy store, which can do it for you. After printing, cut out the category and question cards. Then fit the category cards into the top slots and the appropriate question cards below them from the lowest point value on top to the highest point value on the bottom of each column. If you do not have a game board, you can either create one on your blackboard or whiteboard and tape up the questions, or you can download it from the Teacher's Corner. Because the board itself requires paper larger than most printers are equipped for (24"x36"), we suggest saving it to a CD, floppy disk, or USB drive and taking it to the nearest copy store, which should be able to print it out to the correct dimensions – 24 inches by 36 inches. Many teachers laminate the question cards and the Environmental Jeopardy game board they create so they can use it with ease in the future.

When setting up the board, make sure the point value side of the question card is visible. Preparing the board will take about 10-15 minutes, so try to set up the board before your class arrives. Once the board is ready, simply divide the class into small groups (between 3 and 5 students) so they may learn the value of collaboration. Each group will pick a question according to its point value in a specific category. The teacher will read the question from the back of the card and the group will have thirty seconds to agree on an answer. If they answer the question correctly, they can choose another question. Each group can answer up to three questions in a row before allowing another group to have a turn. If a group does not answer a question correctly, the next group will have a chance to answer the question and then continue with their turn. The team with the most points at the end of the game wins!

To help make the subject matter of this game more relevant to your students we have included "Did you know?" facts with some of the answers, a list of Web sites with additional information about the issues covered, and a supplementary lesson plan available at the end of this document.

We hope you and your students enjoy the third edition of *Environmental Jeopardy*, and we thank you for making EDN and environmental education a regular part of your curriculum. Environmental education can be an integral part of all subject areas and grade levels.

## Further Research on the Web

*Environmental Jeopardy questions are designed to pique your class's interest in environmental issues. In this edition, issues are related to your local environment. This list of Web sites will serve as a good start for conducting research and learning more about your neighborhood or city.*

1. Earth Day Network: EDN has valuable information throughout its website regarding this version of Environmental Jeopardy, including lesson plans. Here are some places to start:
  - a. Earth Day Network homepage: [www.earthday.net](http://www.earthday.net)
  - b. Teachers Corner: <http://www.earthday.net/involved/teachers/join-Network.aspx>
  - c. Ecological Footprint: <http://www.earthday.net/Footprint/index.asp>
  - d. Civic Education Page: [http://www.earthday.net/involved/teachers/civic\\_education.aspx](http://www.earthday.net/involved/teachers/civic_education.aspx)
2. United Nations Environment Programme (UNEP): <http://www.unep.org> - an umbrella website for many environmental issues, including freshwater, energy, urban issues, sustainable consumption, and poverty.
3. The Environmental Protection Agency: <http://www.epa.gov> - The EPA is the US government agency mainly responsible for environmental issues. Among other topics, it has information on clean air and water, and land contaminants.
  - a. EPA Kid's Club: <http://www.epa.gov/kids/>
  - b. EPA High School Web site: <http://www.epa.gov/highschool/index.htm>
4. Enviromapper: <http://www.epa.gov/enviro/html/em/index.html> - an interactive electronic map, searchable by city or zip code, that contains a wide variety local environmental information, including pesticide use, water contamination, chemical use, radiation, brown-fields, and waste.
5. Natural Resources Defense Council: <http://www.nrdc.org/> - contains good information on many local resources and also conducts important studies concerning them.
6. The Food and Drug Administration: <http://www.fda.gov/> - A branch of the Department of Health and Human Services, the FDA regulates a wide range of products from prescription and over-the-counter drugs, to toothpaste and Tupperware containers, in order to ensure they are not hazardous to the public.
7. Union of Concerned Scientists: <http://www.ucsusa.org/> - contains explanations about the environmental issues associated with fossil fuel use, global warming, healthy food, and energy consumption.
8. Greenpack: [http://greenpack.rec.org/flash\\_wheel/index.html](http://greenpack.rec.org/flash_wheel/index.html) - A site with information about a host of environmental issues related to the questions in Environmental Jeopardy. It is very interactive and great for students.

## **The Categories**

*Your Local Environment*

Below is a brief description of the five categories in this edition.

**Urban Issues** – Questions in this category deal with specifically urban environmental issues such as concentrated pollution and trash, traffic, and energy conservation. This category also focuses on the inherent environmental benefits to city living.

**Suburban and Rural Issues** – Questions in this category focus on environmental issues that affect suburban neighborhoods and rural areas. Specific areas of focus include sprawl, energy use, and the impacts of farming and runoff

**Think Globally, Act Locally** – In this category students will learn how their individual choices have global environmental effects. The questions stress a global responsibility and offer suggestions for how to take action and work for the environment.

**Support Your Local Resource** – In this category, questions will focus on the natural resources important to our everyday lives. They include air, water, fossil fuels and renewable energies. The questions also focus on how these resources can be depleted or replenished through environmental action.

**Empowering the Environment** – Questions in this category deal with taking action to preserve the environment and to build awareness. They focus on what non-voting students can do to increase their civic engagement and connect with the surrounding environment.

Category

# SUBURBAN AND RURAL ISSUES

## Urban Issues 10 Points

Which is more environmentally friendly: A flat, wide warehouse or a skyscraper?

*The skyscraper. A skyscraper that sits on one acre of land and is 48 stories tall has 1.6 million square feet of floor space. Also, most of the energy that escapes from buildings does so through the roof, which is smaller on a skyscraper. Finally, workers in a skyscraper do a lot of traveling in elevators, which is very efficient because elevators move up and down mostly by being pulled by a weight (like a large pulley) rather than through pure horsepower.*

## Urban Issues 20 Points

Because there are so many people, businesses, and industries, urban areas produce more trash than rural areas. In 1999 alone, what process helped to reduce the amount of trash heading to landfills and incinerators by 64 million tons?

*Recycling.*

Did you know...?

*The US currently recycles 28% of its waste, while 90% is potentially recyclable. So while urban areas produce more trash, it is also important for rural and suburban areas to recycle what they can.*

Category

# URBAN ISSUES

## Urban Issues 30 Points

How do trees help to reduce the negative effects of pollution from car exhaust?

*A large percentage of car exhaust is carbon dioxide, a very common greenhouse gas. Trees capture and convert the carbon dioxide to oxygen, reducing the amount that reaches the atmosphere. This is why lots of trees in urban areas, where there are more cars, is very important. Additionally, trees provide shade to help cool cities and the people who live in them and attract birds and other animals to urban areas.*

**Urban Issues**  
**10 Points**

**Urban Issues**  
**20 Points**

**Urban Issues**  
**30 Points**

Category

SUPPORT YOUR LOCAL  
RESOURCE

**Suburban and Rural Issues**  
**10 Points**

The suburbs of a city attract many residents because people can purchase larger homes in nice neighborhoods for the same price they would pay for a smaller place in the center of a city. What are two drawbacks to suburban living?

*Possibilities include: people who work in the city have longer commute times; suburban areas are less dense, so frequent and longer car trips are often necessary, which increases the amount of money a family pays for gas; larger homes mean higher energy costs and consumption; suburbs generally offer fewer entertainment options than city centers.*

**Suburban and Rural Issues**  
**20 Points**

The average suburban household takes how many car trips per day: 3, 13, 23?

*Thirteen.*

Did you know...?

*The average number of car trips a person living in an urban area takes varies a lot with the type of city he or she lives in. The number of car trips in low density cities like Phoenix and Los Angeles comes close to the number in suburbs, but people who live in cities with a large and efficient public transportation system, like New York and Boston, may not need a car at all.*

**Suburban and Rural Issues**  
**30 Points**

Each year, 375 million pounds of what toxic substance is sprayed in the US? It is usually sprayed on crops.

*Pesticides.*

Did you know...?

*Of the most common pesticides, 13 are known carcinogens (cancer-causing), and 140,000 pesticide poisonings are reported each year in the US. Pesticides can also find their way into streams and groundwater around where they are sprayed, which can affect local residents, usually living in rural areas.*

Category

THINK GLOBALLY,  
ACT LOCALLY

**Suburban and Rural Issues**  
**10 Points**

**Suburban and Rural Issues**  
**20 Points**

**Suburban and Rural Issues**  
**30 Points**

*Environmental Jeopardy, Primary Level Questions*  
**Category: Think Globally, Act Locally**

**Think Globally, Act Locally**  
**10 Points**

Give one environmental benefit to buying locally grown food as opposed to imported food.

*Possibilities include: imported foods are more likely to be grown on large farms where pesticides are often used; large farms also often do not rotate their crops each year, which contributes to topsoil runoff; and finally, more fossil fuels and infrastructure like roads and ships are required for transporting crops from far away.*

**Think Globally, Act Locally**  
**20 Points**

Ten countries account for two thirds of the world's forest cover. How do the other countries of the world depend on the forests in these countries?

*Trees have a tremendous worldwide impact. Responses could include: the vast majority of plants and animals are located in forests, particularly rainforests; forests reduce the amount of carbon dioxide in the air, which slows global warming; many cures to diseases have been discovered in the world's forests; deforestation results in a loss of topsoil, which can hurt a country's ability to grow crops, reducing the amount it can export to other countries that need it.*

**Think Globally, Act Locally**  
**30 Points**

Which clean resource holds enough potential energy to supply the entire world's energy needs? It already heats the world all by itself.

*The sun.*

Did you know...?

*Did you know...? Although the sun's energy cannot be used up, solar panels – the devices that catch the sun's energy and can turn it into electricity – are not yet efficient enough to replace power plants that burn fossil fuels. However, they are often used to power private homes and businesses. Your family or school can install solar panels, which can lower your energy bills and decrease pollution.*

Category

**EMPOWERING THE  
ENVIRONMENT**

**Think Globally, Act Locally**  
**10 Points**

**Think Globally, Act Locally**  
**20 Points**

**Think Globally, Act Locally**  
**30 Points**

*Environmental Jeopardy, Primary Level Questions*  
**Category: Support Your Local Resource**

**Support Your Local Resource**  
**10 Points**

The average American uses nearly 70 gallons of water per day. Name three things you can do to reduce the amount of water you use.

*Responses will vary. Possibilities include: turning off the water when brushing your teeth; buying newer, more efficient, appliances that use less water; taking shorter showers and taking showers instead of baths.*

Did you know...?

*Water-free urinals are already on the market. A cartridge with a liquid sealant allows water to flow through without allowing odor to escape. The urinals are projected to save between 9,600 and 24,500 gallons of water per cartridge.*

**Support Your Local Resource**  
**20 Points**

Which is the most commonly used fossil fuel resource in the United States, generating 54% of the country's electricity? It is cheap, abundant, and dirty.

*Coal. The US is thought to have about 265 billion short tons of coal reserves spread out over 38 states, mostly in the Appalachian region and the Midwest. Only China contains more coal.*

**Support Your Local Resource**  
**30 Points**

What percentage of the water on Earth today existed when dinosaurs roamed the Earth over 65 million years ago?

*One hundred percent. The amount of water on Earth is the same today as it has always been. Because this amount is constant, water conservation is important not because we are using up the water we have, but because we are using it at a faster rate than it can be treated and recycled.*

Did you know...?

*This does not mean, however, that each country's water supply has remained the same. Both water resources and the continents themselves are constantly shifting, which can change the amount of water each country holds within its boundaries.*

**Support Your Local Resource**  
**10 Points**

**Support Your Local Resource**  
**20 Points**

**Support Your Local Resource**  
**30 Points**

*Environmental Jeopardy, Primary Level Questions*  
**Category: Empowering the Environment**

**Empowering the Environment**  
**10 Points**

April 22, 1970 was one of the first organized demonstrations of the modern environmental movement. What is celebrated each year by a half-billion people worldwide on this day?

*Earth Day falls each year on April 22.*

Did you know...?

*Started by Denis Hayes and Senator Gaylord Nelson, Earth Day is the largest secular holiday in the world and is a symbol of environmentalism.*

**Empowering the Environment**  
**20 Points**

If you can't vote, what is one way you might use your democratic voice to draw attention to the environment?

*Possibilities include: writing a letter to a local or school official or newspaper, learning about an issue and speaking to your friends and parents about it, donating money or volunteering for a nonprofit group or charity.*

**Empowering the Environment**  
**30 Points**

Name one environmental issue you think most affects your city or neighborhood and one way of changing it.

*Credit may be awarded for any answer the teacher finds acceptable.*

**Empowering the  
Environment  
10 Points**

**Empowering the  
Environment  
20 Points**

**Empowering the  
Environment  
30 Points**

**Urban Issues**  
**100 Points**

New York City is larger than all but 11 states. If it were made into a state, where would it rank in the amount of energy it uses per person?

*Fifty-first (last).*

Did you know...?

*The reason New York is so efficient is because its huge number of people are so close together. Manhattan alone contains 1.8 million people on a 23 square mile island, a density 800 times greater than the nation as a whole. If you turned New York into suburban sprawl, it would cover an area greater than all of the New England states, and the transit system, which accounts for a third of all public transportation miles logged in the US, would no longer be able to serve its customers..*

**Urban Issues**  
**80 Points**

Some environmentalists claim that lots of traffic in large cities is a good thing. How could this be?

*When people have the option, most will choose to drive. High traffic encourages people to walk, ride their bike, or take public transportation, which reduces the amount of fossil fuel use more than plans to widen streets and build expressways, which encourage more people to drive. So embrace your local traffic!*

Did you know...?

*Some city planners actually create obstacles to car traffic like speed bumps, stop signs, and curves in the road to discourage driving. Meanwhile they use street space for bicycle lanes and sidewalks to encourage alternative forms of transportation.*

**Urban Issues**  
**20 Points**

Which is more environmentally friendly: A flat, wide warehouse or a skyscraper?

*The skyscraper. A skyscraper that occupies one acre of land and is 48 stories tall has 1.6 million square feet of floor space. Also, its slim width means that less energy escapes from the roof than in a wide building. Finally, workers in a skyscraper do a lot of traveling in elevators, which is very efficient because elevators move up and down mostly by being pulled by a weight (like a large pulley) rather than through pure horsepower.*

**Urban Issues**  
**40 Points**

Because of the high concentration of population, businesses, and industry, urban areas produce more trash than rural areas. In 1999 alone, what process helped to reduce the amount of trash heading to landfills and incinerators by 64 million tons?

*Recycling.*

Did you know...?

*The US currently recycles 28% of its waste, while 90% is potentially recyclable. So while urban areas produce more trash, it is also important for rural and suburban areas to recycle what they can.*

**Urban Issues**  
**60 Points**

How do trees help to reduce the negative effects of pollution from car exhaust?

*A large percentage of car exhaust is carbon dioxide, a very common greenhouse gas, which trees capture and convert to oxygen, reducing the amount of carbon dioxide that reaches the atmosphere. This is why heavy tree cover in urban areas, where car density is greatest, is particularly important.*

**Urban Issues**  
**20 Points**

**Urban Issues**  
**100 Points**

**Urban Issues**  
**40 Points**

**Urban Issues**  
**80 Points**

**Urban Issues**  
**60 Points**

**Suburban and Rural Issues**  
**80 Points**

Coal mining, especially strip mining (a method that removes the top layer of land rather than tunneling underneath it), affects huge areas of rural land in the US. When coal is uncovered, the material around the coal usually is acidic but is not harvested. When people cover the mine once it is closed, what would this acidic material do to this top layer?

*Typically, unless special precautions are taken, this land remains barren for years. Other materials are also left behind as solid waste.*

Did you know....?

*Mining coal can also threaten local populations because pollutants like sulfuric pyrite are washed away and find their way into streams and groundwater.*

**Suburban and Rural Issues**  
**100 Points**

Each year, 375 million pounds of what toxic substance is sprayed in the US? It is usually sprayed on crops.

*Pesticides.*

Did you know....?

*Of the most common pesticides, 13 are known carcinogens (cancer-causing), and 140,000 pesticide poisonings are reported each year in the US. Pesticides can also find their way into streams and groundwater around where they are sprayed, which can affect local residents, usually in rural areas.*

*Environmental Jeopardy, Secondary Level Questions*  
**Category: Suburban and Rural Issues**

**Suburban and Rural Issues**  
**20 Points**

Which accounts for the greatest percentage of water use in the US: industry, agriculture, private homes and individuals?

*By far, agriculture accounts for the largest percentage of water use: 80% in the US as a whole and over 90% in some western states.*

Did you know...?

*Since 1970 agriculture's share of water use has actually declined while its land area has increased by 30%, a discrepancy that can be attributed largely to more efficient irrigation methods.*

**Suburban and Rural Issues**  
**40 Points**

Imagine you are an environmental consultant and a company is considering moving its headquarters from an office building in a big city to a suburban area where they can lease a large, undeveloped area of land for less money. What is one environmental concern you might list to get the company to change its mind?

*There are a number of possibilities: the company could be disturbing the habitat of certain plants and animals; buildings in the suburbs usually cover more area, requiring more resources to run, which is not only bad for the environment but would cost the company more in bills than it is paying now; finally, an office building in a big city allows many of its employees who also live in the city to commute to work using public transportation, while an office in the suburbs would force all of the company's employees to drive to work.*

**Suburban and Rural Issues**  
**60 Points**

The suburbs of a city attract many residents because people can purchase larger homes in nice neighborhoods for the same price they would pay for a smaller place in the center of a city. What are two drawbacks to suburban living?

*Possibilities include: people who work in the city have longer commute times; suburban areas are less dense, so frequent and longer car trips are often necessary, which increases the amount of money a family pays for gas; larger homes mean higher energy costs and consumption; suburbs generally offer fewer entertainment options than city centers.*

**Suburban and Rural Issues**  
**20 Points**

**Suburban and Rural Issues**  
**40 Points**

**Suburban and Rural Issues**  
**60 Points**

**Suburban and Rural Issues**  
**100 Points**

**Suburban and Rural Issues**  
**80 Points**

**Think Globally, Act Locally**  
**80 Points**

The United States consumes about 20.4 million barrels of oil per day. What percentage of this demand is imported: 18%; 38%; 58%; 78%?

*Fifty-eight percent, or 11.8 million barrels per day, is imported.*

Did you know...?

*Although Saudi Arabia, with reserves of about 262 billion barrels, is the largest oil producer, it is behind Canada and Mexico in the amount of oil it exports to the US. When they are more widely available, renewable and inexhaustible energy technologies, such as solar and wind power, will allow the US to domestically produce the vast majority of its energy needs.*

**Think Globally, Act Locally**  
**100 Points**

Which clean resource holds enough potential energy to supply the entire world's energy demands?

*The sun.*

Did you know...?

*Although the sun's energy is inexhaustible, solar panels – the devices that catch the sun's energy and convert it to electricity – are not yet efficient enough to make their widespread use possible. However, they are often used to power private homes and businesses. Your family or school can install solar panels, which can lower your energy bills and decrease pollution.*

*Environmental Jeopardy, Secondary Level Questions*  
**Category: Think Globally, Act Locally**

**Think Globally, Act Locally**  
**20 Points**

California uses more water per year than any other state. It has 36 million residents and a \$27 billion farming industry accounting for 20% of all irrigation in the US. What river is the single largest water source for the state?

*The Colorado River.*

Did you know...?

*Historically, California was able to use more than its share of the river's water because states that also had shares, like Nevada and Arizona, did not use all they were given. Today both Arizona and Nevada use their full share, however, creating a yearly water shortage in California. Water from the river now only supplies 52% of what it used to in California.*

**Think Globally, Act Locally**  
**40 Points**

According to theories of global warming, how might your car trip to school today eventually cause sea levels to rise around the globe?

*Carbon dioxide is a major element of car exhaust which rises to the atmosphere and traps heat trying to escape into space. This heat slowly warms the globe to the point that glaciers in Greenland and icebergs in Antarctica melt, resulting in higher sea levels.*

Did you know...?

*Carbon dioxide is also the reason Venus is the hottest planet in the solar system. Although Mercury is closer to the sun, Venus' atmosphere is over 90% CO<sub>2</sub>, which traps more heat than Mercury's atmosphere does, and makes the planet hotter.*

**Think Globally, Act Locally**  
**60 Points**

Ten countries account for two thirds of the world's forest cover. How do the other countries of the world depend on these forests?

*Trees have a tremendous worldwide impact. Responses could include: the vast majority of plants and animals are located in forests, particularly rainforests; forests reduce the amount of carbon dioxide in the air, which slows global warming; many cures to diseases have been discovered in the world's forests; deforestation results in a loss of topsoil, which can hurt a country's ability to grow crops, reducing the amount it can export to other countries that need it.*

**Think Globally, Act Locally**  
**20 Points**

**Think Globally, Act Locally**  
**40 Points**

**Think Globally, Act Locally**  
**60 Points**

**Think Globally, Act Locally**  
**100 Points**

**Think Globally, Act Locally**  
**80 Points**

**Support Your Local Resource**  
**80 Points**

Forty-five percent of people in the US live in areas that do not meet national air quality standards. This fact is a major contributor to which chronic disease that causes breathing problems and is very common among children?

*Asthma. Although a person can be genetically predisposed to asthma, its onset is triggered most commonly by air pollution and allergies.*

**Support Your Local Resource**  
**100 Points**

In contrast to point source water pollution from industry and sewage treatment plants, nonpoint source pollution, or NPS, is the term given to pollution and sediment that water picks up as it moves across the land and deposits in rivers and lakes. What might be an example of NPS pollution? Some possibilities include: agricultural runoff (pesticides and fertilizer), urban runoff (oil, and other pollutants that can be found in the street), salt from farms, or sediment from construction sites.  
Did you know...?

*In 1970, point source pollution accounted for 85% of water pollution problems in the US, and nonpoint for 15%. Today those numbers are reversed, which is important because NPS pollution is more difficult to regulate. Imagine having to apply for a permit to wash your car!*

*Environmental Jeopardy, Secondary Level Questions*  
**Category: Support Your Local Resource**

**Support Your Local Resource**  
**20 Points**

Which government agency is responsible for setting safety standards for the United States' drinking water?

*The Environmental Protection Agency (EPA). The EPA only regulates water coming from the nation's public water systems, which serves approximately 250 million people. Users of private wells are on their own. Additionally, while the EPA sets the standards, local governments and water suppliers are responsible for making sure the water they supply complies with these standards.*

Did you know...?

*Unlike tap water, bottled water is regulated by the Food and Drug Administration (FDA) and the individual states. However, a study by the Natural Resources Defense Council found that those regulations are not strict enough to guarantee that bottled water is safer than tap water, and because bottled water is more expensive and generates a lot of waste, tap water is usually the best option.*

**Support Your Local Resource**  
**40 Points**

Which is the most commonly used fossil fuel resource in the United States, generating 54% of its electricity? It is cheap, abundant, and dirty.

*Coal. The US is estimated to have about 265 billion short tons of coal reserves spread out over 38 states, mostly in the Appalachian region and the Midwest. Only China contains more coal.*

**Support Your Local Resource**  
**60 Points**

Which area in North America contains 18 percent of the world's fresh surface water?

*The Great Lakes Basin.*

Did you know...?

*Although the Earth is 75% water, only 2.5% of it is freshwater, and because a lot of that is locked up in glaciers and icebergs, only one-half of one percent of all water on Earth is usable. This is why it is so important to preserve our freshwater resources, like the Great Lakes, which today are constantly threatened by inadequately treated sewage, fertilizer, and wastewater.*

**Support Your Local Resource**  
**20 Points**

**Support Your Local Resource**  
**40 Points**

**Support Your Local Resource**  
**60 Points**

**Support Your Local Resource**  
**100 Points**

**Support Your Local Resource**  
**80 Points**

**Empowering the Environment  
100 Points**

If you can't vote, what is one way you might use your democratic voice to draw attention to the environment?

*Possibilities include: writing a letter to a local or school official or newspaper, learning about an issue and speaking to your friends and parents about it, donating money or volunteering for a nonprofit group or charity.*

**Empowering the Environment  
80 Points**

Name one environmental issue you think most affects your city or neighborhood and one way of changing it.

*Credit may be awarded for any answer the teacher finds acceptable.*

*Environmental Jeopardy, Secondary Level Questions*  
**Category: Empowering the Environment**

**Empowering the Environment  
20 Points**

Which "rough rider" president is often seen as the father of the national park system in the US?

*Theodore Roosevelt.*

Did you know...?

*Over the course of his presidency, Roosevelt established 42 million acres of national forest, 53 national wildlife refuges, and 18 areas of special interest, many of which, like the Grand Canyon, were later converted into national parks. The only other president to preserve as much land was Bill Clinton.*

**Empowering the Environment  
40 Points**

Name three people or places you could write a letter to expressing your concern about the environment. You don't need to give the person's name

*Possibilities include: the president, your senator, your representative, the local newspaper, an online media source, the student council, the PTA, and the school newspaper.*

**Empowering the Environment  
60 Points**

April 22, 1970 was one of the first organized demonstrations of the modern environmental movement. What is celebrated each year by a half-billion people worldwide on this day?

*Earth Day falls on April 22 every year.*

Did you know...?

*Started by Denis Hayes and former Senator Gaylord Nelson, Earth Day is the largest secular holiday in the world and is a symbol of environmentalism.*

**Empowering the  
Environment  
20 Points**

**Empowering the  
Environment  
100 Points**

**Empowering the  
Environment  
40 Points**

**Empowering the  
Environment  
80 Points**

**Empowering the  
Environment  
60 Points**

## Rate Your Local Environment and Quality of Life

The theme for the third edition of Environmental Jeopardy is “Your Local Environment.” The questions in this edition help you realize that a lot of environmental and social factors, as well as economic factors, help determine a community’s quality of life. Although a complicated formula exists to determine a nation’s quality of life, called the Quality of Life Index, in this exercise you will consider how a few simple environmental issues affect the quality of your life.

*Individually or in small groups, answer the following questions in order to rate how environmental issues affect your quality of life. Web sites following the questions may help you find some answers. Take time to discuss the best answer and why and how your answer contributes to your communities’ environmental health and your quality of life. When you are done, compare your answers with other students to determine a class average. Circle five for the best answer and one for the worst.*

Do you spend a lot of time commuting to school or work?

A lot of time    1        2        3        4        5        Not much time

Are alternative modes of transportation such as walking, biking, or using public transportation easy for you to use?

No    1        2        3        4        5        Yes

Do you have access to public parks, forests, beaches, or outdoor recreational areas?

No    1        2        3        4        5        Yes

Does your community or region of the country produce many of the foods you eat?

No    1        2        3        4        5        Yes

Does your community have a good recycling program?

No    1        2        3        4        5        Yes

If there are farmers and ranchers in your community, do they use environmentally friendly methods of production?

No    1        2        3        4        5        Yes

Do factories and retailers use environmentally friendly business practices?

No    1        2        3        4        5        Yes

Do you have access to healthy and organic foods at school or in a local grocery store?

No    1        2        3        4        5        Yes

Does your power come from renewable sources?

No    1        2        3        4        5        Yes

The air in my community is healthy and there are few environment related illnesses like asthma and dust allergies.

False 1 2 3 4 5 True

The water in my community is clean and safe to drink.

False 1 2 3 4 5 True

Plant and animals that are indigenous to my region of the country are not in danger due to human activities.

False 1 2 3 4 5 True

Do you see many public and private vehicles (busses, cars, etc) using alternative fuels such as natural gas, hybrid technologies, or battery power?

No 1 2 3 4 5 Yes

Does your local government encourage the use of alternative forms of transportation using financial incentives?

No 1 2 3 4 5 Yes

Do the sidewalks in your city hold lots of trees and plants providing shade, beauty, and biodiversity to your community?

No 1 2 3 4 5 Yes

*Here are some Web sites that will help you find answers to some of the above questions and learn how local environmental issues affect the quality of life in your community:*

US Environmental Protection Agency's Air Now site, <http://airnow.gov/>

US Environmental Protection Agency's Enviromapper – see what's happening in your community at <http://www.epa.gov/enviro/html/em/index.html>

US Environmental Protection Agency's Clean Energy Page – Use the “Clean Energy Tools” to learn more about power use in your community, <http://www.epa.gov/cleanenergy/index.htm>

Eat Well Guide – find organic and healthy foods in your community, <http://www.eatwellguide.org/>

## The Enviromapper

Visit the USEPA's Enviromapper site, <http://www.epa.gov/enviro/html/em/index.html> Visit the "Envirofacts" mapper and punch in your zip code. Create a color map from this page and copy onto an overhead projector sheet to share with your class or a group of students. Answer the following questions:

1. How many sites in your zip code are "regulated"?
2. What percent of the regulated sites are toxic releases, water discharges, air emissions, and hazardous waste?
3. Roll the mouse over some of the sites to find out what they are. Try to explain why some of the regulated sites are listed as environmental concerns.
4. Describe the neighborhoods that have the most regulated sites and which have the least.