

SUPER-SIZE
TEACHER GUIDE

Science,
the Environment
& Geography



A
Hollister Kids
Teacher Guide
From:

THE NEWSPAPER IS A VALUABLE SOURCE OF INFORMATION FOR STUDENTS

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Credits: This Super-Size Teacher Guide was created by Hollister Kids for syndication to newspapers nationally. The writer was Peter Landry. The graphic designer was Jessica Lonczewski.

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Science

From outer space to the inner workings of computers, advances in science and technology have changed the way people live. And science continues to make news everyday.

The activities in this Teacher Guide have been created to help students use the newspaper to explore the changes that new discoveries are bringing to all fields of science. The activities may also be used to extend the lessons of a science Newspaper in Education supplement with additional deliveries of newspapers. The Teacher Guide also is designed to demonstrate how the newspaper can be an effective teaching tool.

Each section of the Teacher Guide features a collection of newspaper activities that explore an aspect of science and 8¹/₂ x 11 activity sheets that teachers may photocopy and distribute. As an added educational feature, each activity is followed by a reference line that details what national standards and skills are addressed by the activity.



UNIT 1

- Science Everywhere
- High-Tech Jobs
- Science Fiction
- Energy Conservation
- Internet Advantages

UNIT 2

- Space Teamwork
- Spacy Names
- Big Numbers
- New Products
- Exploration Dollars

UNIT 3

- Internet Shopping
- Health, Science & Medicine
- Genetics News
- Say It With Art
- Local Business

UNIT 4

- Student Communication
- That's Entertainment
- Internet Issues
- Cable TV
- Future Business

SCIENCE IN THE WORLD

Science is all around us, and it is changing all aspects of our lives. Advances in technology are transforming the way we communicate and learn. Discoveries in medicine are bringing new drugs and treatments. Breakthroughs in energy and transportation are changing the way we get around. The activities for Unit 1 look at the influences of science around us, and introduce the newspaper to students.

1. Science Everywhere

How aware are students of the ways science influences their lives? Have students pair off and search the newspaper for 10 items they use regularly. Encourage them to pick items that cover a variety of fields—communication, entertainment, health, transportation, food, education, etc. Ask them to list their items on a sheet of paper. Next to each one, have them write how science was used to develop the product. For added challenge, ask them to write which kind of science, or branch, was most important to developing the product.

STANDARDS/SKILLS: Conducting simple investigations; showing how common themes of science, mathematics and technology apply in real-world contexts.

2. High-Tech Jobs

Technology is changing almost all jobs. Have students look through the Help Wanted ads in the classified section of the newspaper. Ask them to write down 10 jobs that list some kind of technology skill as something needed for the position. Then have them rank the jobs in order for needing technology. No. 1. will be the most important, No. 2 second-most, etc. Discuss findings as a class.

STANDARDS/SKILLS: Describing ways in which technology is used in everyday life; understanding the role of labor in local and national economies.

3. Science Fiction

Science fiction mixes real science with imagination. Have your students find a story about a scientific topic in today's newspaper. Challenge them to write a proposal for a science fiction story based on the facts they find. A good

way to think up ideas is to look at a fact and ask "What If...?"

STANDARDS/SKILLS: Employing multiple strategies to construct meaning; acquiring information from multiple sources; writing to develop fluency for multiple purposes, including stories, reports and plays.

4. Energy Conservation *

Conserving energy will be a key issue in the future. One reason is that there is a limited amount of oil, gas and coal on Earth. Another is that burning these fossil fuels increases greenhouse gases. Have students pick a picture of an indoor or outdoor scene in today's newspaper. Using the "Energy Conservation" activity sheet, challenge them to list as many ways as they can how energy is being used in the picture. Finish by having them write a way the amount of energy could be reduced for each type of use.

STANDARDS/SKILLS: Describing energy and the many common forms it takes; identifying forms of energy associated with common phenomena; describing how energy is conserved during transformations.

5. Internet Advantages

The growth of the Internet is one of the most dramatic changes brought about by science and technology. Challenge students to search the stories and ads in the newspaper for examples of how the Internet is playing a bigger role in our lives every day. Have them keep a tally of the examples they find. Then ask them to chart their findings in a bar graph. Finish by having them write the beginning of a news story summarizing their findings.

STANDARDS/SKILLS: Responding to ideas generated by oral, visual and electronic texts; organizing data using tables, charts and graphs; analyzing the organized data.

SPACE EXPLORATION

Science is making news every day. And one of the top sources of science news is the exploration of space. The activities in Unit 2 look at space and space exploration through the newspaper.

1. Space Teamwork *

Teamwork is important in exploring space. Divide students into teams to plan the launch of a space probe. Their goal: to gather together the scientists needed for the effort. Have each team look through the Classified Ads in the newspaper and find all the science-related jobs available today. Using the "Space Teamwork" activity sheet, have them list which jobs would be important to launching a space probe, and write out why. Are there any important jobs for the probe that are missing from the Classifieds? If so have them write Help Wanted ads seeking people to fill these jobs.

STANDARDS/SKILLS: Developing an awareness of contributions made to science by people of diverse backgrounds.

2. Spacy Names *

Many sports teams have adopted space-age nicknames: The Houston Rockets, the Houston Comets, the Phoenix Suns and others. Ask students to look through the sports section of the newspaper and see how many such nicknames they can find. Then with the "Spacy Names" activity sheet, have them come up with three space names for sports teams they like. Challenge them to explain what the space term says about a team. Finish by having them draw a team logo for each one.

STANDARDS/SKILLS: Experimenting with different ways to express ideas; demonstrating how communication can be influenced by word usage.

3. Big Numbers

Space missions are a great way to test knowledge about huge numbers. The Galileo mission, which traveled to Jupiter, was one. Radio signals, for example, take 52 minutes to travel from Earth to Jupiter. Jupiter is about a half billion miles from Earth. Based on this, challenge students to compute how fast radio waves travel in

space—per hour, minute and second. Finish by asking students to find three examples of big numbers in the newspaper and to create a word problem for each one. Have them exchange word problems. Allow them to use calculators to solve the problems.

STANDARDS/SKILLS: Performing calculations to describe the speed and direction of an object; recognizing equivalent representations of numbers, such as decimals.

4. New Products

Science news is important to newspapers because scientific discoveries often lead to new products. As a class, think of an item invented for space exploration that is now used for other things. Then have students find stories in today's newspaper about other scientific discoveries. List possible uses for the discoveries.

STANDARDS/SKILLS: Showing how themes of science, mathematics and technology apply in real world contexts; describing advantages and risks of new technologies.

5. Exploration Dollars

The United States has been a world leader in the exploration of space almost from the beginning. But each satellite or space shuttle costs millions of dollars. Many people in Congress want to cut spending on space as a way to save money. Have students brainstorm about the good and bad results of cutting spending, and the value of the scientific information gotten from space. Finish by having them write the first three paragraphs of a news story based on the ideas expressed in class. Make sure they include more than one point of view in their accounts.

STANDARDS/SKILLS: Engaging each other in conversations that attempt to clarify and resolve issues pertaining to national policy; explaining how public issues become problems and why people disagree about them.



SPACE TEAMWORK

Teamwork is important in exploring space. Divide into teams to plan the launch of a probe to a space destination of your choice. **Your team's goal: to gather together the people needed for the effort.** Look through the Classified Ads and find all the science-related jobs available today. List which jobs would be important to launch your space probe, and write out why. Are there any important jobs for the probe that are missing from the Classifieds? If so, write Help Wanted Ads seeking people to fill these jobs on the back of this activity sheet.

Destination of Our Probe:

Job

Why Necessary

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SPACY NAMES

Many sports teams have adopted space age nicknames: the Houston Rockets, the Houston Comets, the Phoenix Suns and others. Look through the sports section of the newspaper and see how many such nicknames you can find. In the spaces below, come up with three space names for sports teams you like. Explain what the space term says about each team. Finish by drawing a team logo for one of your choices on the back of this sheet.



ACTIVITY SHEET

New Name for Team I Like: _____

Explanation: _____

New Name for Team I Like: _____

Explanation: _____

New Name for Team I Like: _____

Explanation: _____

UNIT 3

LIFESTYLE

Science and technology are transforming our lifestyles and lives. Advances in medicine are conquering diseases and even challenging the limits of old age. "Smart" homes and cars make day-to-day life easier through computers. Buying and selling products has been transformed by "e-commerce" and online services. The activities for Unit 3 explore the way science has impact on our lifestyle.

1. Internet Shopping

Websites have become a common addition to the way businesses identify themselves. Many experts predict "e-commerce" will eventually replace store shopping. Have students skim today's paper and find five ads that include listings for Internet websites. Next to each, have them write a sentence explaining what they think might be offered on a site that is not included in an ad. Finish by asking them to decide whether they would buy the product advertised online.

STANDARDS/SKILLS: Analyzing how purchasers obtain information about goods and services from advertising and other sources; analyzing the reliability of information when making economic decisions.

2. Health, Science & Medicine

Health, science, medicine and food get much attention from newspapers because they affect so many people. Have students look through the newspaper today or for several days and find a story about one of these subjects. Ask them to write a sentence stating the new development in the study. Then have them write a sentence stating who the finding will affect, and how it will affect them in the future.

STANDARDS/SKILLS: Acquiring information from multiple sources and then organizing and communicating it; showing how common themes of science and technology apply in real world contexts.

3. Genetics News

The field of genetics has made a lot of news in the last several years. First scientists cloned sheep by inserting the genes of an adult into a cell to create an embryo. Then scientists created "smart mice" by manipulating the genes that control memory. Should such techniques be used with people? Discuss cloning and genetics as a class. Then challenge students to search the

newspaper for possible human subjects for cloning. Ask them to pick one person they would approve of cloning and one person whom they think it would be a bad idea to clone. Discuss choices as a class.

STANDARDS/SKILLS: Engaging each other in conversations that attempt to clarify and resolve issues of local, state and national policy; explaining how a public issue became a problem and why people disagree about it.

4. Say It With Art *

Editorial cartoons use art to make a point or state an opinion. Ask students to browse through today's newspaper to find a life-style issue involving science or technology that will be important to teenagers in the future. Using the "Say It With Art" activity sheet, have them draw an editorial cartoon showing the good or bad that could occur on the issue.

STANDARDS/SKILLS: Using oral, written and visual texts to research issues of importance that confront adolescents; identifying and using the craft of the writer and illustrator to express ideas.

5. Local Business

Will your city be a "player" in the technology world of the future in jobs and business? What products will factories in your area make that will be needed worldwide? In teams, have students read the business section of the newspaper today or for several days. As a class, discuss what technology products and services are created locally for use elsewhere. Challenge students to use what they have gathered from the newspaper to predict how your city will contribute goods or services in the high-tech future.

STANDARDS/SKILLS: Acquiring information from multiple sources and then organizing and communicating it; identifying the current and potential contributions of national and world regions to trade.

SAY IT WITH ART

Editorial cartoons use art to make a point or state an opinion. Browse through today's newspaper to find a lifestyle issue involving science and technology that will be important to teenagers in the future. Using the space below, draw an editorial cartoon showing a good or bad thing that could happen with this issue.



ACTIVITY SHEET

UNIT 4

COMMUNICATION

In the course of the last century, the science of communication went through huge changes. The century saw the development and evolution of telephones, radio, television, cable and the Internet. Satellite communication allowed people to be connected all the time through wireless devices like cell phones. The activities in Unit 4 focus on communication as it makes news today, and how it may in the future.

1. Student Communication *

How do students today communicate? How do they get information they need for school or pleasure, and how do they convey information to others? With the "Communicate!" activity sheet, challenge students to find 10 communication devices or systems in today's newspaper. Have them check off whether they use each to receive information, give information to others or both. Next ask them to rank the kinds of communication. Finish by having them pick the item or system they think will change the most in the future and write a paragraph explaining why.

STANDARDS/SKILLS: Acquiring information from multiple sources and then organizing and communicating it; showing how common themes of technology apply in real world contexts.

2. That's Entertainment

Science has changed entertainment greatly with technology. As a class, discuss how advertising gives consumers information. Then have students go through the ads in the newspaper and shop for an entertainment system that they think would be tops in technology. Encourage them to mix and match if they like, picking one brand of TV, another brand of CD player, another brand of computer, etc. Have them write a sentence for each item explaining what technology information in the ads made them purchase it.

STANDARDS/SKILLS: Analyzing how purchasers obtain information about goods and services from advertising and other sources; exploring how textual aids are used to convey meaning, including headlines.

3. Internet Issues

The Internet has greatly expanded the way we communicate. With computer science it increases opportunity for free speech and increases the number of people we speak to. It also has created problems involving

privacy and personal standards. As a class, discuss the rights of free speech and privacy ensured by the U.S. Constitution. Ask them to find an example of each right in a story in the newspaper. Then have them write a short editorial about using Internet technology to ensure privacy and free speech online. Post editorials on the bulletin board.

STANDARDS/SKILLS: Interpreting the meaning of rights guaranteed by the U.S. Constitution, including privacy and free speech; explaining how a public issue became a problem and why people disagree about it.

4. Cable TV *

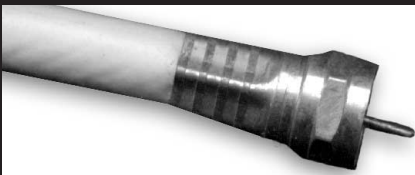
Cable TV has changed entertainment tremendously. One way to see that is to compare shows made today with those from earlier times. Cable TV now runs many old shows. Ask students to turn to the TV listings in the newspaper and pick a show they have seen made today and a show they have seen made in an earlier time. Using the "Cable TV" activity sheet, have them compare the people, plots and language in the shows. Then challenge them to make a prediction about shows of the future.

STANDARDS/SKILLS: Using oral, written and visual texts to identify and research issues of importance; posing questions about life in the community.

5. Future Business

Businesses often are begun when someone sees a need and creates a business to fill it. Have students scan today's newspaper and make a list of five communication or entertainment needs people have. Have them write a sentence stating how those needs may change in the next 20 years. Finish by challenging students to think of a scientific business that will serve a need of the future.

STANDARDS/SKILLS: Connecting economic needs with businesses that meet them; showing how common themes of science and technology apply in real world contexts.



CABLE WORLD

Cable TV has changed entertainment tremendously. One way is that it allows you to easily compare shows made today with those from earlier times. Turn to the TV listings in the newspaper and pick a show you have seen made today and a show you have seen made in an earlier time. Compare them in the spaces below. Then make a prediction about shows in the future on the back of this sheet.

Current Show

Oldie Show

Show's Name

Plot

Technology

Modern
Inventions

Language

Issues

The Environment

In more than 30 years since the first Earth Day, enormous strides have been made to improve the environment, protect wildlife and raise consciousness of people about the importance of ecology.

Millions of people in schools and the community now take the time to celebrate Earth Day by debating, discussing and exploring issues involving nature.

Best of all, millions now roll up their sleeves each Earth Day, get out and DO SOMETHING for the environment.

This Teacher Guide is designed to engage students in the environmental issues that are most important to the Earth. And it shows how every person, young or old, can take steps to make a difference. This guide also is designed to extend the lessons of any Newspaper in Education supplement on the environment with additional deliveries of papers. It contains suggested activities, as well as several 8¹/₂ x 11-inch activity sheets that you may photocopy for students to complete.



TEACHER GUIDE

UNIT 5

- Animal Power
- Nature on TV
- Wildlife Management
- Animals & Humans
- Animal Mascots

UNIT 6

- Animal Habitats
- Take a Poll
- Product Watch
- Land Use
- Fox Run Fields

UNIT 7

- Plant Life
- Plant Food
- Soil Conservation
- Plant Poem
- Time to Plant

UNIT 8

- Volunteer!
- Endangered Animals
- Nature Politics
- Spokespeople
- Global Warming

UNIT 5

ANIMALS

The wild animals of the world may be the most effective way to begin discussing the goals of ecology with students. Animals hold endless fascination for most young people, and they are affected by all the environmental issues facing us today. The activities on this page are designed to introduce environmental issues and the newspaper through the animals of the Earth.

1. Animal Power

Animal news is important to newspapers because many people are fascinated by animals' power, beauty and independence. Ask students to find a photo, story or ad in the paper that involves an animal. Have them write a paragraph describing why the animal is in the paper, and what makes it interesting to people. Finish by having them design a poster featuring this animal. Encourage them to add their own art, if they like.

STANDARDS/SKILLS: Generating questions about issues that affect students or topics about which they are curious; using the craft of the writer and illustrator to formulate and express ideas artistically.

2. Nature on TV

Television reflects our interest in nature, wildlife and habitats. Challenge students to go through the TV listings in today's newspaper and count how many shows are about nature. Have them summarize which topics seem to be the most common. Then have them show the number of nature programs as a pie or bar graph.

STANDARDS/SKILLS: Using written and visual texts to identify and research issues of importance or interest; organizing data using tables, charts and graphs.

3. Wildlife Management

Managing the number of wildlife in parks is often a controversial issue. If animal herds get too large, they require more food than a park can supply. But reducing

the numbers by hunting or killing is considered cruel by many people. Challenge students to think of themselves as a park manager and try to come up with a wildlife management plan for a park. Ask them to make an outline for an editorial describing their recommendations.

STANDARDS/SKILLS: Explaining how a public issue became a problem and why people disagree about it; evaluating possible resolutions of a public issue.

4. Animals & Humans*

Wild animals or animal habitats often make news. Have students find a story or picture of an animal or habitat in today's newspaper. On the "Animals and Humans" activity sheet, ask them to make a list of dangers that human activity presents the animal or habitat. Next to each danger, have them list a possible solution or protection.

STANDARDS/SKILLS: Describing ways in which humans alter the environment; describing the basic requirements for all living things to maintain their existence; evaluating possible resolutions to a public issue.

5. Animal Mascots

Animals are often used as the mascots or names for pro teams. Look through the sports section and list the teams named for animals. How many are endangered species? Does it help or hurt an animal to be used as a team name or mascot?

STANDARDS/SKILLS: Demonstrating awareness of visual communication; acquiring information from multiple sources and then evaluating it; posing questions about matters of public concern.

ANIMALS & HUMANS

Wild animals or animal habitats often make news. Find a story or picture of an animal or habitat in today's newspaper. In the space below make a list of dangers that human activity presents the animal or habitat. For each danger, list a possible solution or protection.

Danger #1 _____

Possible Solution: _____

Danger #2 _____

Possible Solution: _____

Danger #3 _____

Possible Solution: _____

Danger #4 _____

Possible Solution: _____

UNIT 6

HABITATS

Changes in habitat are among the most dramatic and important in the field of ecology. Development and climate changes are transforming natural areas, and the impact is felt by both plants and animals. How humans treat natural habitats will determine the health and stability of the environment in the future. The activities on this page use the newspaper to examine the nature of habitats.

1. Animal Habitats*

Where wild animals live is their habitat. Some habitats are forests, some are fields, some are swamps. Some even are city parks. As a class, discuss different habitats for wild animals that can be found locally. Then ask students to find a photo of a natural habitat in the paper. Using the “Animal Habitats” activity sheet, challenge them to make a list of every animal that could live in the habitat. Then have them make a list of ways to protect the habitat.

STANDARDS/SKILLS: Describing the basic requirements of all living things to maintain their existence; describing ways in which humans alter the environment; acquiring information from multiple sources.

2. Take a Poll

Protecting the environment is an area that spotlights the debate over how much government control is necessary—and how much is too much. Stage a class debate on tougher clean air rules, with one side for and one against. At the end of the debate take a vote. Then poll another class that did not see the debate and compare results. Have students write the lead paragraphs and a headline for a news story summarizing the findings of your poll.

STANDARDS/SKILLS: Explaining how a public issue became a problem and why people disagree about it; engaging each other in conversations which attempt to clarify policy issues; acquiring information from multiple sources and then evaluating it.

3. Product Watch

Products we buy and use can have serious impact on the environment. Paints and oils, for example, can harm ecosystems if not disposed of properly. Have students select pictures or names of products from newspaper ads and stories that may be harmful

to the environment. Ask them to write out the names of the items, listing them under the following categories: lawn care products, home improvement items, food products, household products and car care items. Have them be on the alert also for items that are advertised as being safer for the environment.

STANDARDS/SKILLS: Obtaining information about goods and services from advertising and other sources; describing ways in which humans alter the environment; organizing social science information to make tables, charts and graphs.

4. Land Use

How humans use the land has a great effect on how healthy the environment is as a whole. Have students look through the newspaper and identify at least 10 uses of land. Ask them to write out how each situation affects the environment or ecosystem it is part of.

STANDARDS/SKILLS: Explaining the effect of human activities on selected ecosystems; interpreting social science information about the natural environment from primary and secondary sources.

5. Fox Run Fields*

Real estate developers often choose names from nature for housing developments. Fox Run Fields, Estates at Rocky Knoll, Meadow Glen Ford are some examples. Have students search the real estate ads for five names from nature. Ask them to pick one and write a paragraph stating what the builder hopes the name will say about the development. Finish by using one of the names as a starter for a poem, limerick or haiku about nature.

STANDARDS/SKILLS: Describing how people use the environment to meet human needs and wants; developing critical standards based on aesthetic qualities; writing fluently for multiple purposes, including poetry.

ANIMAL HABITATS

Where wild animals live is their habitat. Some habitats are forests, some are fields, some are swamps. Some even are city parks. As a class, discuss different habitats for wild animals that can be found locally. Then find a photo of a possible habitat in the paper. Make a list of every animal that could live in the habitat. Then make a list of possible threats to the habitat. On the back of this sheet draw a cartoon showing how animals might adapt to the threat.

Animals That Could Live In The Habitat

- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |

Ways To Protect The Habitat

- _____

- _____

- _____

FOX RUN FIELDS

Real estate developers often choose names from nature for housing developments. Fox Run Fields, Estates at Rocky Knoll, Meadow Glen Ford are some examples. Search the real estate ads for five names from nature. Pick one and write a paragraph stating what the builder hopes the name will say about the development. Finish by using one of the names as a starter for a poem, limerick or haiku about nature.

Real Estate Names From Nature

1. _____
2. _____
3. _____
4. _____
5. _____

What The Builder Hopes The Name Will Say About The Development...

PLANTS

Animals may get most of the attention, but plants are the key to health of natural habitats. Plants affect and support animal and human life in varied and far-reaching ways. The activities on this page take a closer look at plants and ecology through the newspaper.

1. Plant Life*

Plants play an important role in human and animal lives. Plants provide food, plants provide medicines, plants like trees provide materials for building or shelter. Have students look through the ads and photos of the newspaper and list as many products and materials as they can that come from plants. Encourage them to stretch their thinking. Finish by having them rate the products or materials in order of importance to them and their families.

STANDARDS/SKILLS: Explaining how humans use and benefit from plant and animal materials; responding to visual and written texts by making connections to students' personal lives and the lives of others.

2. Plant Food

Plants grown as food are important to good diet. Ask students to scan the newspaper for food ads. Have them clip out pictures of foods that come from plants and assemble them into an art collage. On a sheet of paper ask them to list the plant foods by groups in the food pyramid. Finish by challenging them to come up with a title for their Plant Collage.

STANDARDS/SKILLS: Explaining how humans use and benefit from plant and animal materials; acquiring information from multiple sources and then organizing and communicating it in various contexts.

3. Soil Conservation

Plants play another role in nature besides food and shelter. They also are significant in soil conservation. Plants prevent soil from washing away on slopes or hills and from drying out and blowing away as dust. Have

students find a photo of an outdoor scene in the newspaper. Ask them to list all the ways plants preserve the environment in the photo. Have them write a sentence explaining the most important way plants help the environment in the photo.

STANDARDS/SKILLS: Generating scientific questions about the world based on observation; describing responses of an ecosystem to events that cause it to change.

4. Plant Poem*

Ask students to write a diamond-shaped "diamante" poem about the roles plants play in preserving the environment in Question 3. A diamante has one word on the first line, two on the second in a 1,2,3,4,5,6,5,4,3,2,1 pattern. The first and last lines should be the word Plants. Have students illustrate their diamantes and display on a bulletin board.

STANDARDS/SKILLS: Describing common ecological relationships; writing fluently for multiple purposes, including poetry; using the craft of the illustrator to express ideas artistically.

5. Time to Plant

Spring is the time when many people start planting their yards and gardens with beautiful plants, flowers and vegetables. Using the newspaper's advertising and fliers, have students plan a garden. Ask them to figure out how much it will cost to buy enough flowers or plants to fill the space they want to plant. Make sure they don't forget such items as mulch, fertilizer, tools they might need, etc.

STANDARDS/SKILLS: Obtaining information about goods and services from advertising and other sources; designing a strategy for spending and investing their resources.

PLANT LIFE

Plants play an important role in human and animal lives. Plants provide food, plants provide medicines, plants like trees provide materials for building or shelter. Look through the ads and photos of the newspaper and list as many products and materials as you can that come from plants. Stretch their thinking as you do this. Some things are not obvious. Finish by rating the products or materials in order of importance to you and your family.

Rating Products & Materials

_____	A.	_____
_____	B.	_____
_____	C.	_____
_____	D.	_____
_____	E.	_____
_____	F.	_____
_____	G.	_____
_____	H.	_____
_____	I.	_____
_____	J.	_____
_____	K.	_____
_____	L.	_____
_____	M.	_____
_____	N.	_____
_____	O.	_____

UNIT 8

GETTING INVOLVED

Learning about the environment on Earth Day is a positive thing for students. But learning they can DO THINGS to help the environment is even better. Getting involved can make a difference in both small and large ways. The activities on this page use the newspaper to explore ways people can get involved in improving the environment.

1. Volunteer!*

Ask students to scan the paper today or for several days for an outdoor photo of a place in the city or region that would benefit from volunteers helping clean or maintain it. Have them write why the place needs help, who might help, what skills they would need, and who would benefit from the help.

STANDARDS/SKILLS: Suggesting ways people can help improve their environment; describing the consequences of positive and negative human/environment interactions.

2. Endangered Animals

Ask students to find the name of an endangered animal in the news, sports or ads in the newspaper. Then have them turn to the letters to the editor page to see how they are written. Challenge them to write a letter to the editor about the endangered animal they have chosen. Have them write why the animal is endangered and how people could help the animal survive in the future.

STANDARDS/SKILLS: Describing the basic requirements for all living things to maintain their existence; evaluating possible resolutions to a public issue; utilizing the persuasive power of text as an instrument of change.

3. Spokespeople

When working to improve the environment, it often helps to have celebrities to call attention to a problem. Groups often have celebrity spokespeople to speak out and appear in ads. Have students search today's newspaper for a celebrity or leader to appear as a spokesperson for an environmental cause. Ask them to write a sentence stating why they chose this person, and

what his/her celebrity could bring to the cause. Finish by having them design a newspaper ad using this celebrity to call attention to their cause.

STANDARDS/SKILLS: Generating questions about issues that affect them or topics about which they are curious; using the craft of the writer and illustrator to formulate and express ideas artistically.

4. Nature Politics

Preserving or cleaning the environment is often a political issue. Ask students to search the paper for a political leader or group in the news that they could call to help with an environmental problem. Ask them to write a paragraph explaining why they chose this politician or group to ask for help. Have them write a second paragraph stating what they hope the person or group will do.

STANDARDS/SKILLS: Evaluating possible resolutions of public issues; engaging in activities intended to solve a problem.

5. Global Warming

The heat-trapping gases that increase global warming are produced by such human activities as driving cars, running power plants, using air conditioning. Discuss the problem of global warming as a class. Then ask students what steps they would recommend people and nations take to reduce these gases. Have students go through the ads in the paper for products that use oil, gasoline or electricity or are made of plastics. Challenge them to choose which they would use less of if it would reduce global warming.

STANDARDS/SKILLS: Describing ways in which humans alter the environment; evaluating possible resolutions to a public issue; responding to written, visual and electronic texts by making connections to students' personal lives.

VOLUNTEER!

Volunteers can make a big difference in improving the environment. Scan the paper today or for several days for an outdoor photo of a place in the city or region that would benefit from volunteers helping clean or maintain it. In the space below, write the name of the place, why the place needs help, who might help, what skills they would need, and who would benefit from the help.

Place

Why It Needs Help

Who Might Help

Skills Needed

Who Benefits

ACTIVITY SHEET

Geography

Geography is not just the study of land and water. It is the study of how and where people live.

Natural features, climate, distance and resources shaped and directed the course of human civilization. And they continue to influence how humans interact with the natural world, how development occurs, which local economies succeed and which don't.

This Teacher Guide is designed to help you introduce the newspaper to your students for the study of geography. It also may be used to extend the lessons of any Newspaper In Education supplement on geography through additional deliveries of newspapers.

The guide contains suggested activities for using the newspaper, as well as 8 1/2 x 11 inch activity sheets that you may photocopy for students to complete. As a special teaching feature, each activity is accompanied by a description of the national standards and skills it is designed to support.



UNIT 9

- Where You Live
- Know the Nation
- Natural Features
- Your City & State
- It's Human

UNIT 10

- Cause & Effect
- You Can Help
- What Is an Ecosystem?
- Vacation Features
- What Humans Want

UNIT 11

- Diverse Communities
- Landmarks
- World Events
- Migration
- Connecting With the World

UNIT 12

- Map It
- Lakes
- State Geography
- Boundary Watch
- Tour the Country

PLACES & CULTURES

Geography is not just a story of land, water and the elements. It is a story of people and how they have dealt with land, water and the elements. Understanding where people choose to live, and why, is a cornerstone of geography education. The activities on this page use the newspaper to help students describe, compare and explain the locations and characteristics of places, cultures and settlements.

1. Where You Live*

Why do people live in your region? Have students go through the newspaper and find examples of jobs, recreation, lifestyles and culture that attract people to the region. Using the "Where You Live" activity sheet, have them list 7 reasons people live in this state and area.

STANDARDS/SKILLS: Explaining why people live and work as they do in different regions.

2. Know the Nation*

The United States is one of the most diverse countries in the world. San Francisco is very different from Detroit, and both are different from Miami or Dallas. Different regions have different cultures and characteristics. Divide the class into teams and have them scan stories and photos in the newspaper that show different cities in the United States. On the "Know the Nation" activity sheet, have them list five cities and write a short description of what they are like.

STANDARDS/SKILLS: Locating and describing the major places, cultures and communities of the nation and comparing their characteristics.

2. Natural Features

Natural features often make news. Rivers may overflow their banks and flood neighborhoods. Forests may become dry and catch fire. Have students look through the photos and stories in the newspaper for news made by natural features. Ask them to pick one and write a summary of what made news.

STANDARDS/SKILLS: Describing the natural characteristics of places and explaining some basic causes for those characteristics.

4. Your City & State

What are your city and state like? Have students use the newspaper to catalog the natural characteristics that shape the physical environment of your area. Have them make a master list of water bodies, land features and landmarks found in the photos and stories of the newspaper today or over several days. Ask them how they think those features formed over time. Finish by asking them to draw a picture showing features of the natural environment in their neighborhood.

STANDARDS/SKILLS: Describing the natural characteristics of places and explaining some basic causes for those characteristics.

5. It's Human

Physical geography only explains part of what a place is like. The rest is determined by the world humans create in a place. The culture, buildings and attractions all contribute to define a place. Have students go through the newspaper and study photos of the region. For each photo have them list the man-made things that give a place personality or a special quality. Finish by challenging them to use their lists to write a short essay describing the "human characteristics" of the region as shown in the photos and how they came to be.

STANDARDS/SKILLS: Describing the human characteristics of places and explaining some basic causes for those characteristics.



WHERE YOU LIVE

Why do people live in your region? Go through the newspaper today and find examples of jobs, recreation, neighborhoods and culture attractions that people like about the region. In the spaces below, list 7 reasons people live in this state and/or area. Next to each, write how geography played a part in creating the attraction.

Attraction

Geography's Role

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

KNOW THE NATION

The United States has more kinds of different places than most nations of the world. The City of San Francisco is very different from the City of Detroit, for example. Divide into teams and study photos in the newspaper that show different cities in the United States. In the spaces below, list three cities and the page number where they are found in the paper. Then write a short description of what each is like. Finish by finding the cities on a map.



p. ___ City #1 _____

Description: _____

p. ___ City #2 _____

Description: _____

p. ___ City #3 _____

Description: _____

UNIT 10

ECOSYSTEMS & RESOURCES

Humans are just one part the environment, but they play a huge role in the way the resources of the environment are used. The study of geography involves understanding how humans are connected to the world around them. The activities on this page will help students describe, compare and explain the locations and characteristics of ecosystems, resources, human adaptation, environmental impact and the interrelationships among them.

1. Cause & Effect

When people develop natural areas, they sometimes risk damage from the environment. Building near creeks, for example, can leave homes susceptible to floods. Floods can cause great damage. Ask students to find a photo in the newspaper that shows a neighborhood, street or outdoor area. Challenge them to make a list of everything that would be affected in the photo if a flood filled the area shown.

STANDARDS/SKILLS: Explaining how humans modify the environment and describing some of the possible consequences of those modifications.

2. You Can Help

There are many ways people can help improve the environment. They could get involved to clean parks, for example, or they could raise money for an environmental cause. Have students find a photo of an outdoor scene in the newspaper. Ask them to brainstorm three things people could do to improve the environment by visiting the site pictured. Then ask them to brainstorm three things they could do to bring improvement without visiting the site. Discuss as a class.

STANDARDS/SKILLS: Explaining basic ecosystem concepts; suggesting ways people can help improve their environment.

3. What Is an Ecosystem?*

An ecosystem is the physical environment of a place. It includes land features, bodies of water and all the animals and plants that live there. Using the "What Is an Ecosystem?" activity sheet, have students search the newspaper for as

many things as they can find that would be part of the local ecosystem.

STANDARDS/SKILLS: Explaining basic ecosystem concepts and processes.

4. Vacation Features

Natural features often make places interesting as vacation sites. Have students look through the ads and photos in today's newspaper. Ask them to pick one that shows an outdoor place they might like to visit. Have them design a travel ad describing the natural features in the picture so that people will want to visit in person. Finish by having them looking for travel ads that show other natural attractions.

STANDARDS/SKILLS: Describing how people use the environment to meet human needs and wants.

5. What Humans Want

How humans treat the natural environment reflects the needs and desires of people. From the earliest settlers people have seen natural resources as assets for people. Have students look through the newspaper today or for several days and find examples of natural resources being used by people. Make a class list on the chalkboard and rank them in order of importance to the life and well-being of people. Then rank them in order of importance for protection or preservation. Compare the lists. What conclusions can students draw?

STANDARDS/SKILLS: Describing how people use the environment to meet human needs and wants.

WHAT IS AN ECOSYSTEM?

An ecosystem (EE-co-SIS-tem) is made up of the land features and bodies of water in a place, plus all the animals and plants that live there. Search the newspaper for as many things as you can find that would be part of the local ecosystem. List them below. Then draw a picture to show the local ecosystem on the back of this sheet.



Parts of an Ecosystem...

- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| _____ | _____ |
| 2. _____ | 8. _____ |
| _____ | _____ |
| 3. _____ | 9. _____ |
| _____ | _____ |
| 4. _____ | 10. _____ |
| _____ | _____ |
| 5. _____ | 11. _____ |
| _____ | _____ |
| 6. _____ | 12. _____ |
| _____ | _____ |

UNIT 11

TRADE & MIGRATION

How landforms and bodies of water shape and influence the activities of people is a major part of the study of geography. The activities on this page use the newspaper to help students describe, compare and explain economic activities, trade, political activities, migration, information flow and the interrelationships among them.

1. Diverse Communities*

Except for American Indians, families in this country all came originally from other countries. In teams, have students search the newspaper for people of different ethnic groups. On the "Different Backgrounds" activity sheet, have them list as many as they can and the countries they came from originally. At the end, have each student list where his/her ancestors came from originally. As a class, graph the results.

STANDARDS/SKILLS: Identifying people, goods, services and ideas in the local community that have come from other places and describing why they moved.

2. Landmarks*

What are the natural and man-made landmarks of your community? Have students look through the photos of the newspaper and make a master list for the area. For each man-made landmark, have students write a reason it was placed where it is.

STANDARDS/SKILLS: Identifying locations of significance in the immediate environment and explaining reasons for their location.

3. World Events

As a class, turn to the foreign news section of the newspaper. Have students find a story or stories that involve more than one foreign country. Summarize with them what is making news in each story. Finish by having them write a sentence or two explaining how the events in the stories have consequences for neighboring countries or the world.

STANDARDS/SKILLS: Explaining how events have causes and consequences in different parts of the world.

4. Migration

Geography gives students a framework for tracing the movements of peoples in a nation or the world. Have students turn to the national weather map in the newspaper. Explain how the first European settlers came here, and where Europe is located. Ask them to discuss how the United States was settled. Then have them locate your state on a U.S. map. Have them discuss how your state was settled. Finish by asking them to write newspaper headlines describing settlement patterns in your state and the U.S..

STANDARDS/SKILLS: Describing the causes, consequences, routes and movement of major migration to the United States.

5. Connecting With the World

A famous poet once said "no man is an island." He meant that every person is connected to other people. No city or region is an island, either. Have students discuss how goods and people come to the local community. Then ask them to search the ads in the newspaper for products and foods that have come from other parts of the country. Make a master list on the chalkboard. Then have students mark the places on a U.S. map.

STANDARDS/SKILLS: Identifying people, goods, services and ideas in the local community that have come from other places and describing why they moved.

DIFFERENT BACKGROUNDS

Except for American Indians, families in this country all came from other countries originally. In teams, search the newspaper for people of different ethnic groups. In the spaces below list as many as you can find and the countries they came from originally. At the bottom, list where your ancestors came from originally. As a class, graph the results.

Ethnic Group

Country

1. _____

2. _____

3. _____

4. _____

5. _____



My Family Came From...

LANDMARKS

What are the natural and man-made landmarks of your community? Look through the photos of the newspaper and make a master list. For each natural landmark write a reason how it came to be; for each man-made landmark, write a reason it was placed where it is. Put a star next to all the natural landmarks.



Landmark

Reason

1. _____

2. _____

3. _____

4. _____

5. _____

GEOGRAPHY & THE WORLD

As they study geography, students will learn that their community is part of a series of larger communities. These include: the city, the region, the state, the country and the world. The activities on this page use the newspaper to help students compare characteristics of ecosystems, states, regions, countries, major world regions and patterns and to explain the processes that created them.

1. Map It

What places make news in your community? Have students draw a map of the city or state, labeling places that make news in the newspaper today or over several days. Or draw the map as a class, with the students doing the in-paper research. Are certain places in the news over and over? Ask students to write a brief explanation of why that might be the case. Have them repeat the exercise for the nation.

STANDARDS/SKILLS: Drawing sketch maps of the community, region and nation.

2. Lakes

Lakes are a huge ecosystem and a great subject for geographic study. Have students collect news about lakes from the newspaper. Then have them draw a picture of a lake ecosystem, labeling its different parts and features. Make sure they include the behavior of humans.

STANDARDS/SKILLS: Describing a lake ecosystem, and explaining physical and human processes that act upon the lakes.

3. State Geography

With human actions and development, the geography of states is constantly changing. Ask students to collect information from the newspaper on the physical, economic and cultural geography of your state today. Challenge them to write a poem describing this geography.

STANDARDS/SKILLS: Describing the physical, economic and cultural geography of your state today and its advantages and disadvantages.

4. Boundary Watch*

Explain how boundaries can be formed by natural features or man-made. Have them find maps in the newspaper that accompany news stories or use the national weather map. On the activity sheet titled "Boundary Watch," have them list every kind of boundary that they found in their map or maps. Next to each, have them check off whether the boundary is natural or man-made. Discuss what regions are formed by boundaries.

STANDARDS/SKILLS: Identifying regions in the immediate environment and describing their characteristics and boundaries.

5. Tour the Country

Every day the newspaper covers news and culture from other parts of the United States. This can be a good way for students to gain understanding of the nation's diverse cultures and communities. Divide students into teams and have them create clip files of photos and stories from other regions. After a week or month, ask them to pick one place they have found in the paper and write a description of its culture and character. Have them finish by comparing it to the culture and character of your community.

STANDARDS/SKILLS: Describing places, cultures and communities in the United States and comparing them with those in other regions and countries.

BOUNDARY WATCH

Find maps in the newspaper that accompany news stories or use the national weather map. In the spaces below, list every kind of boundary you found in the maps. Next to each, check off whether the boundary is natural or man-made. Discuss what regions are formed by boundaries.



Boundary

1. _____ natural man-made
2. _____ natural man-made
3. _____ natural man-made
4. _____ natural man-made
5. _____ natural man-made
6. _____ natural man-made
7. _____ natural man-made
8. _____ natural man-made
9. _____ natural man-made
10. _____ natural man-made