

Helping Your Child Learn Geography

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Helping Your Child Learn Geography

Foreword

Remember thumbing through an atlas or encyclopedia as a child, imagining yourself as a world traveler on a safari in Africa, or boating up the Mississippi River, climbing the peaks of the Himalayas, visiting ancient cathedrals and castles of Europe, the Great Wall of China? We do. The world seemed full of faraway, exotic, and wonderful places that we wanted to know more about.

Today, we would like to believe that youngsters are growing up similarly inquisitive about the world. Perhaps they are, but recent studies and reports indicate that, if such imaginings are stirring in our youngsters, they're not being translated into knowledge. Not that there ever was a "golden age" when all our young and all our citizens were conversant about the peoples and places of the globe. Still, there is considerable evidence that such knowledge among young Americans has dipped to an alarming low.

Last year, a nine-nation survey found that one in five young Americans (18- to 24-year-olds) could not locate the United States on an outline map of the world. Young Americans knew measurably less geography than Americans 25 years of age and over. Only in the United States did 18- to 24-year-olds know less than people 55 years old and over; in all eight other nations, young adults knew more than the older ones.

No less disturbing was the fact that our young adults, when compared with young adults in other countries, came in last place in a 1980 Gallup Poll. Our 18- to 24-year-olds knew less about geography than their age-mates in every other participating nation. But it shouldn't surprise us. Youngsters in other countries study more geography. In England, Canada, and the Soviet Union, geography is considered one of the basic academic subjects and is required of most secondary students; in the United States, only one in seven students takes a high school geography course.

You'd think that our students learn at least some geography, though, in their world history classes. Those who take world history probably do. But that's only 44 percent of

our high school graduates. More than half of our high school students are graduating without studying world history.

If youngsters are to acquire an appreciation of geography and ultimately learn to think geographically, parents and communities must insist that local schools restore it to prominence in the curriculum. They should insist that geography be studied and learned, in one form or another, through several years of the primary and secondary curriculum.

Learning should not be restricted to the classroom. Parents are a child's first teachers and can do much to advance a youngster's geographic knowledge. This booklet suggests some ways to do so.

It is based on a fundamental assumption: that children generally learn what adults around them value. The significance attached to geography at home or at school can be estimated in a glance at the walls and bookshelves.

Simply put, youngsters who grow up around maps and atlases are more likely to get the "map habit" than youngsters who do not. Where there are maps, atlases, and globes, discussions of world events (at whatever intellectual level) are more likely to include at least a passing glance at their physical location. Turning to maps and atlases frequently leads youngsters to fashion, over time, their own "mental maps" of the world--maps that serve not only to organize in their minds the peoples, places, and things they see and hear about in the news, but also to suggest why certain events unfold in particular places.

Helping every child develop his or her ability to use maps and to develop mental maps of the world ought to become a priority in our homes and schools. For, as we all know, our lives are becoming an ever tighter weave of interactions with people around the world. If our businesses are to fare well in tomorrow's world markets, if our national policies are to achieve our aims in the future, and if our relationships with other peoples are to grow resilient and mutually enriching, our children must grow to know what in the world is where.

This booklet is designed to help parents stir children's curiosity and steer that curiosity toward geographic questions and knowledge. It is organized around the five themes recently set forth by geographers and geography educators across the Nation--the physical location of a place, the character of a place, relationships between places, movement of people and things, and phenomena that cause us to group places into

particular regions.

We encourage parents to get to the fun part--that is, the activities. The games, maps, and suggested activities that follow, while informal and easy to do, can help lay a solid foundation in experience for children's later, more academic forays into geography.

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Introduction

Children are playing in the sand. They make roads for cars. One builds a castle where a doll can live. Another scoops out a hole, uses the dirt to make a hill, and pours some water in the hole to make a lake. Sticks become bridges and trees. The children name the streets, and may even use a watering can to make rain.

Although they don't know it, these children are learning the principles of geography. They are locating things, seeing how people interact with the Earth, manipulating the environment, learning how weather changes the character of a place, and looking at how places relate to each other through the movement of things from one place to another.

With this book, we hope you, as parents, will get ideas for activities that will use your children's play to informally help them learn more geography--the study of the Earth.

Most of the suggestions in this book are geared to children under 10 years of age. The activities and games are organized around five specific themes that help focus our thinking. These themes were developed by the Joint Committee on Geographic Education of the National Council for Geographic Education and the American Association of Geographers and are now being used in many schools. They are:

1. Where are things located?

2. What makes a place special?
3. What are the relationships among people and places?
4. What are the patterns of movement of people, products, and information?
5. How can the Earth be divided into regions for study?

These themes have been adopted by many schools in the last few years and may be new to many parents. To help focus your awareness of the issues, we will begin each chapter with a brief description of the theme. This description includes examples of questions geographers use as they strive to understand and define the Earth, for geography provides us with a system for asking questions about the Earth.

Location:

Position on the Earth's Surface

Look at a map. Where are places located? To determine location, geographers use a set of imaginary lines that crisscross the surface of the globe. Lines designating "latitude" tell us how far north or south of the equator a place is. Lines designating "longitude" measure distance east and west of the prime meridian--an imaginary line running between the North Pole and the South Pole through Greenwich, England. You can use latitude and longitude as you would a simple grid system on a state highway map. The point where the lines intersect is the "location"--or global address. For example, St. Louis, Missouri, is roughly at 39° (degrees) north latitude and 90° west longitude.

Why are things located in particular places and how do those places influence our lives? Location further describes how one place relates to another. St. Louis is where the Mississippi and the Missouri rivers meet about midway between Minneapolis-St. Paul and New Orleans. It developed as a trading center between east and west, north and south.

Directions

To help young children learn location, make sure they know

the color and style of the building in which they live, the name of their town, and their street address. Then, when you talk about other places, they have something of their own with which to compare.

- * Children need to understand positional words. Teach children words like "above" and "below" in a natural way when you talk with them or give them directions. When picking up toys to put away, say, "Please put your toy into the basket on the right" or, "Put the green washcloth into the drawer." Right and left are as much directional terms as north, south, east, and west. Other words that describe such features as color, size, and shape are also important.

- * Show your children north, south, east, and west by using your home as a reference point. Perhaps you can see the sun rising in the morning through a bedroom window that faces east and setting at night through the westerly kitchen window:

- * Reinforce their knowledge by playing games. Once children have their directional bearings, you can hide an object, for example, then give them directions to its location: "two steps to the north, three steps west"

- * Use pictures from books and magazines to help your children associate words with visual images. A picture of a desert can stimulate conversation about the features of a desert--arid and barren. Work with your children to develop more complex descriptions of different natural and cultural features.

Maps

Put your child's natural curiosity to work. Even small children can learn to read simple maps of their school, neighborhood, and community. Here are some simple map activities you can do with your children.

- * Go on a walk and collect natural materials such as acorns and leaves to use for an art project. Map the location where you found those items.

- * Create a treasure map for children to find hidden treats in the back yard or inside your home. Treasure maps work especially well for birthday parties.
- * Look for your city or town on a map. If you live in a large city or town, you may even be able to find your street. Point out where your relatives or your children's best friends live.
- * Find the nearest park, lake, mountain, or other cultural or physical feature on a map. Then, talk about how these features affect your child's life. Living near the ocean may make your climate moderate, prairies may provide an open path for high winds, and mountains may block some weather fronts.
- * By looking at a map, your children may learn why they go to a particular school. Perhaps the next nearest school is on the other side of a park, a busy street, or a large hill. Maps teach us about our surroundings by portraying them in relation to other places.

- * Before taking a trip, show your children a map of where you are going and how you plan to get there. Look for other ways you could go, and talk about why you decided to use a particular route. Maybe they can suggest other routes.
- * Encourage your children to make their own maps using legends with symbols. Older children can draw a layout of their street, or they can illustrate places or journeys they have read about. Some books, like Winnie-the-Pooh and The Wizard of Oz, contain fanciful maps. These can be models for children to create and plot their own stories.
- * Keep a globe and a map of the United States near the television and use them to locate places talked about on television programs, or to follow the travels of your favorite sports team.

Additional Activities

Children use all of their senses to learn about the world. Objects that they can touch, see, smell, taste, and hear help them understand the link between a model and the real thing.

- * Put together puzzles of the United States or the world. Through the placement of the puzzle pieces, children gain a tactile and visual sense of where one place is located in relation to others.
- * Make a three-dimensional map of your home or neighborhood using milk cartons for buildings. Draw a map of the block on a piece of cardboard, then cut up the cartons (or any other three-dimensional item) and use them to represent buildings. Use bottle tops or smaller boxes to add interest to the map, but try to keep the scale relationships correct.
- * Use popular board games like "Game of the States" or "Trip Around the World" to teach your children about location, commerce, transportation, and the relationships, among different countries and areas of the world. Some of these games are available at public libraries.
- * Make paper-mache using strips of old newspaper and a paste made from flour and water. If children form balls by wrapping the strips of paper-mache around a balloon, they will develop a realistic understanding of the difficulties in making accurate globes. They can also use paper-mache to make models of hills and valleys.

Place:

Physical and Human Characteristics

Every place has a personality. What makes a place special? What are the physical and cultural characteristics of your hometown? Is the soil sandy or rocky? Is the temperature warm or is it cold? If it has many characteristics, which are the most distinct?

How do these characteristics affect the people living there? People change the character of a place. They speak a particular language, have styles of government and architecture, and form patterns of business. How have people shaped the landscapes?

Investigate Your Neighborhood

- * Walk around your neighborhood and look at what makes it unique. Point out differences from and similarities to other places. Can your children distinguish various types of homes and shops? Look at the buildings and talk about their uses. Are there features built to conform with the weather or topography? Do the shapes of some buildings indicate how they were used in the past or how they're used now? These observations help children understand the character of a place.
- * Show your children the historical, recreational, or natural points of interest in your town. What animals and plants live in your neighborhood? If you live near a harbor, pay it a visit, and tour a docked boat. You can even look up the shipping schedule in your local newspaper. If you live near a national park, a lake, a river, or a stream, take your children there and spend time talking about its uses.
- * Use songs to teach geography. "Home on the Range," "Red River Valley," and "This Land Is Your Land" conjure up images of place. Children enjoy folk songs of different countries like "Sur La Pont D'Avignon, Guantanamara," and "London Bridge." When your children sing these songs, talk with them about the places they celebrate, locate them on the map, and discuss how the places are described.

Study the Weather

Weather has important geographic implications that affect the character of a place. The amount of sun or rain, heat or cold, the direction and strength of the wind, all determine such things as how people dress, how well crops grow, and the extent to which people will want to live in a particular spot.

- * Watch the weather forecast on television or read the weather map in the newspaper. Save the maps for a month or more. You can see changes over time, and compare conditions over several weeks and seasons. Reading the weather map helps children observe changes in the local climate.
- * Use a weather map to look up the temperatures of cities around the world and discover how hot each gets in the summer and how cold each gets in the winter. Ask your children if they can think of reasons why different locations have different temperatures. Compare these

figures with your town. Some children enjoy finding the place that is the hottest or the coldest.

- * Make simple weather-related devices such as barometers, pinwheels, weather vanes, and wind chimes. Watch cloud formations and make weather forecasts. Talk about how these describe the weather in your town.

Learn About Other Cultures

People shape the personality of their areas. The beliefs, languages, and customs distinguish one place from another.

- * Make different ethnic foods, take your children to an ethnic restaurant, or treat them to ethnic snacks at a folk festival. Such an experience is an opportunity to talk about why people eat different foods. What ingredients in ethnic dishes are unique to a particular area? For example, why do the Japanese eat so much seafood? (If your children look for Japan on a map they will realize it is a country of many islands.)
- * Read stories from or about other countries, and books that describe journeys. Many children's books provide colorful images of different places and a sense of what it would be like to live in them. Drawings or photographs of distant places or situations can arouse interest in other lands. *The Little House in the Big Woods*, *Holiday Tales of Sholem Aleichem*, and *The Polar Express* are examples of books with descriptions of place that have transported the imaginations of many young readers. There is a bibliography at the end of this booklet, and your librarian will have more suggestions.

Weather Vane

Materials: wire hanger, small plastic container, aluminum foil, sand or dirt, tape or glue, scissors, crayon.

Directions:

1. Straighten out the hanger's hook and cover half of the

triangle part of the hanger with foil. Fold the edges, and tape or glue in place.

2. Fill the container with sand or loose dirt, put on the lid, and mark it N, S, E, and W. Poke the hanger through the center of the lid. The hanger should touch the bottom of the container and turn freely in the hole.

3. Put the container outside with the N facing north. When the wind blows, take a look at your weather vane. The open half of the vane shows the direction from which the wind is coming.

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Relationships within Places: Humans and Environments

How do people adjust to their environment? What are the relationships among people and places? How do they change it to better suit their needs? Geographers examine where people live, why they settled there, and how they use natural resources. For example, Hudson Bay, the site of the first European settlement in Canada, is an area rich in wildlife and has sustained a trading and fur trapping industry for hundreds of years. Yet the climate there was described by early settlers as "nine months of ice followed by three months of mosquitoes." People can and do adapt to their natural surroundings.

Notice How You Control Your Surroundings

Everyone controls his or her surroundings. Look at the way you arrange furniture in your home. You place the tables and chairs in places that suit the shape of the room and the position of the windows and doors. You also arrange the room according to how people will use it.

- * Try different furniture arrangements with your children. If moving real furniture is too strenuous, try working with doll house furniture or paper cutouts. By cutting out paper to represent different pieces of furniture, children

can begin to learn the mapmaker's skill in representing the three-dimensional real world.

- * Ask your children to consider what the yard might look like if you did not try to change it by mowing grass, raking leaves or planting shrubs or trees. You might add a window box if you don't have a yard. What would happen if you didn't water the plants?
- * Walk your children around your neighborhood or a park area and have them clean up litter. How to dispose of waste is a problem with a geographic dimension.
- * Take your children to see some examples of how people have shaped their environment: bonsai gardens, reservoirs, terracing, or houses built into hills. Be sure to talk with them about how and why these phenomena came to be.
- * If you don't live on a farm, try to visit one. Many cities and States maintain farm parks for just this purpose. Call the division of parks in your area to find out where there is one near you. Farmers use soil, water, and sun to grow crops. They use ponds or streams for water, and build fences to keep animals from running away.

Notice How You Adapt to Your Surroundings

People don't always change their environment. Sometimes they are shaped by it. Often people must build roads around mountains. They must build bridges over rivers. They construct storm walls to keep the ocean from sweeping over beaches. In some countries, people near coasts build their houses on stilts to protect them from storm tides or periodic floods.

- * Go camping. It is easy to understand why we wear long pants and shoes when there are rocks and brambles on the ground, and to realize the importance to early settlers of being near water when you no longer have the convenience of a faucet.
- * If you go to a park, try to attend the nature shows that many parks provide. You and your children may learn about the local plants and wildlife and how the natural features have changed over time.

Movement: People Interacting on the Earth

People are scattered unevenly over the Earth. How do they get from one place to another? What are the patterns of movement of people, products, and information? Regardless of where we live, we rely upon each other for goods, services, and information. In fact, most people interact with other places almost every day. We depend on other places for the food, clothes, and even items like the pencil and paper our children use in school. We also share information with each other using telephones, newspapers, radio, and television to bridge the distances.

Travel in Different Ways

- * Give your children opportunities to travel by car, bus, bicycle, or on foot. Where you can, take other forms of transportation such as airplanes, trains, subways, ferries, barges, and horses and carriages.
- * Use a map to look at various routes you can take when you try different methods of transportation.
- * Watch travel programs on television.

Follow the Movement of People and Things

- * Play the license plate game. How many different States' plates can you identify, and what, if anything, does the license plate tell you about each State? You don't have to be in a car to play. You can look at the license plates of parked cars, or those traveling by when you are walking. Children can keep a record of the States whose plates they have seen. They can color in those States on a map and illustrate them with characteristics described on the license plates. Some States have county names on their plates. If you live in one of these States, keeping track of the counties could be another interesting variation.
- * Go around your house and look at where everything comes from. Examine the labels of the clothes you wear and think of where your food comes from. Why do bananas come from

Central America? Why does the milk come from the local dairy? Perhaps your climate is too cold for bananas, and the milk is too perishable to travel far. How did the food get to your house?

- * Tell your children where your ancestors came from. Find your family's countries of origin, and chart the birthplaces of relatives on a map. You can plot the routes they followed before they arrived at their present location. Why did they leave their previous home? Where do all your relatives live now?
- * Have your children ask older relatives what their world was like when they were young. They can ask questions about transportation, heating and refrigeration, the foods they ate, the clothes they wore, and the schools they attended. Look at old pictures. How have things changed since Grandma was a child? Grandparents and great aunts and uncles are usually delighted to share their memories with the younger generation, and they can pass on a wealth of information.

Follow the Movement of Ideas and Information

Ideas come from beyond our immediate surroundings. How do they get to us? Consider communication by telephone and mail, television, radio, telegrams, telefax, and even graffiti, posters, bumper stickers, and promotional buttons. They all convey information from one person or place to another.

- * By watching television and listening to the radio, your children will receive ideas from the outside world. Where do the television shows they watch originate? What about radio shows?
- * Ask your children how they would communicate with other people. Would they use the phone or write a letter? Encourage them to write letters to relatives and friends. They may be able to get pen pals through school or a pen pal association. (Please see the listing in the back of this booklet.)

Regions:
How They Form and Change

How can places be described or compared? How can the Earth be divided into regions for study? Geographers categorize regions in two basic ways--physical and cultural. Physical regions are defined by landform (continents and mountain ranges), climate, soil, and natural vegetation. Cultural regions are distinguished by political, economic, religious, linguistic, agricultural, and industrial characteristics.

Examine Physical Regions

- * Help your children understand physical regions by examining areas in your home. Is there an upstairs and a downstairs? Is there an eating area and a sleeping area? Are there other "regions" in your home that can be described?
- * Look at the physical regions in your community. Some neighborhoods grew up around hills, others developed on waterfronts or around parks. What physical regions exist in your hometown?

Examine Cultural Regions

- * Take your children to visit the different political, residential, recreational, ethnic, and commercial regions of your city.
- * Go to plays, movies, and puppet shows about people from different countries. These are often presented at libraries and museums.
- * Give children geography lessons by tying in with ethnic holiday themes. Provide children with regional or ethnic clothes to wear. Some museums and libraries provide clothes children can borrow. Holidays provide an opportunity to learn about the customs of people around the world. You can use the library to discover how other people celebrate special days.
- * Compare coins and stamps from other lands. They often contain information about the country. You may be able to find stamps from other countries where you work, or your children may get them from pen pals. Stamps tell many

different kinds of things about a country, from its political leadership to native bird life.

* Learn simple words in different languages. Teach your children to count to 10 in other languages. They can also learn simple words like "hello, goodbye," and "thank you." Look at the different alphabets or script from various regions. All these activities expose children to the abundance of the Earth's cultural treasures. Many libraries have language tapes and books, some especially for children.

* If you have friends who are from different countries or have either travelled or lived abroad, invite them over to talk with your children. If they have pictures, so much the better. What languages do they speak? How are their customs or dress similar to or different from yours?

Conclusion

Geography is a way of thinking, of asking questions, of observing and appreciating the world around us. You can help your children learn by providing interesting activities for them, and by prompting them to ask questions about their surroundings.

Set a good example, and help your children build precise mental images, by always using correct terms. Say, "We are going north to New York to visit Grandma, or west to Dallas to see Uncle John," rather than "up to New York" or "down to Dallas." Use words such as highway, desert, river, climate, and glacier; and explain concepts like city, State, and continent.

Many of the words used in geography are everyday words. But, like any other field of learning, geography has a language of its own. (A glossary of basic geography terms appears in the back of this booklet.)

Expose children to lots of maps and let them see you using them. Get a good atlas as well as a dictionary. Atlases help us ask, and answer, questions about places and their relationships with other areas. Many States have atlases that are generally available through an agency of the state government.

The activities suggested in this booklet are only a few examples of the many ways that children learn geography. These

activities are designed to help parents find ways to include geographic thinking in their children's early experiences. We hope they will stimulate your thinking and that you will develop many more activities on your own.

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Glossary

altitude

Distance above sea level.

atlas

A bound collection of maps.

archipelago

A group of islands or a sea studded with islands.

bay

A wide area of water extending into land from a sea or
lake.

boundaries

Lines indicating the limits of countries, States, or other
political jurisdictions.

canal

A man-made watercourse designed to carry goods or water.

canyon

A large but narrow gorge with steep sides.

cape (or point)

A piece of land extending into water.

cartographer

A person who draws or makes maps or charts.

continent

One of the large, continuous areas of the Earth into which the land surface is divided.

degree

A unit of angular measure. A circle is divided into 360 degrees, represented by the symbol *. Degrees, when applied to the roughly spherical shape of the Earth for geographic and cartographic purposes, are each divided into 60 minutes, represented by the symbol '.

delta

The fan-shaped area at the mouth, or lower end, of a river, formed by eroded material that has been carried downstream and dropped in quantities larger than can be carried off by tides or currents.

desert

A land area so dry that little or no plant life can survive.

elevation

The altitude of an object, such as a celestial body, above the horizon; or the raising of a portion of the Earth's crust relative to its surroundings, as in a mountain range.

equator

An imaginary circle around the Earth halfway between the North Pole and the South Pole; the largest circumference of the Earth.

glacier

A large body of ice that moves slowly down a mountainside from highlands toward sea level.

gulf

A large arm of an ocean or sea extending into a land mass.

hemisphere

Half of the Earth, usually conceived as resulting from the division of the globe into two equal parts, north and south or east and west.

ice shelf

A thick mass of ice extending from a polar shore. The seaward edge is afloat and sometimes extends hundreds of miles out to sea.

international date line

An imaginary line of longitude generally 180° east or west of the prime meridian. The date becomes one day earlier to the east of the line.

island

An area of land, smaller than a continent, completely surrounded by water.

isthmus

A narrow strip of land located between two bodies of water, connecting two larger land areas.

lagoon

A shallow area of water separated from the ocean by a sandbank or by a strip of low land.

lake

A body of fresh or salt water entirely surrounded by land.

latitude

The angular distance north or south of the equator, measured in degrees.

legend

A listing which contains symbols and other information about a map.

longitude

The angular distance east or west of the prime meridian, measured in degrees.

mountain

A high point of land rising steeply above its surroundings.

oasis

A spot in a desert made fertile by water.

ocean

The salt water surrounding the great land masses, and divided by the land masses into several distinct portions, each of which is called an ocean.

peak

The highest point of a mountain.

peninsula

A piece of land extending into the sea almost surrounded by water.

plain

A large area of land, either level or gently rolling, usually at low elevation.

plateau (or tableland)

An elevated area of mostly level land, sometimes containing deep canyons.

physical feature

A land shape formed by nature.

population

The number of people inhabiting a place.

prime meridian

An imaginary line running from north to south through Greenwich, England, used as the reference point for longitude.

range (or mountain range) A group or chain of high elevations.

reef

A chain of rocks, often coral, lying near the water surface.

reservoir

A man-made lake where water is kept for future use.

river

A stream, larger than a creek, generally flowing to another stream, a lake, or to the ocean.

scale

The relationship of the length between two points as shown on a map and the distance between the same two points on the Earth.

sea level

The ocean surface; the mean level between high and low tides.

strait

A narrow body of water connecting two larger bodies of water.

swamp

A tract of permanently saturated low land, usually overgrown with vegetation. (A marsh is temporarily or periodically saturated.)

topography

The physical features of a place; or the study and depiction of physical features, including terrain relief.

valley

A relatively long, narrow land area lying between two areas of higher elevation, often containing a stream.

volcano

A vent in the Earth's crust caused by molten rock coming to the surface and being ejected, sometimes violently.

waterfall

A sudden drop of a stream from a high level to a much lower level.

Glossary, in part, courtesy of Hammond, Incorporated

Free or Inexpensive Materials

Maps

The following places often provide free maps, although you will probably have to go in person or send a self-addressed stamped envelope in order to receive one:

- * State tourist agencies and local chambers of commerce publish walking tour maps or guidebooks to area attractions.
- * Local government offices, especially those dealing with public transportation, often provide free road maps.
- * Car rental companies. The Federal Government has hundreds of maps available. For a comprehensive listing, contact the Government Printing Office (GPO) bookstore in your area or the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The GPO handles the printing and sales of items produced by government agencies. Some examples of what you might find there, or directly through the developing agency, include:
 - * Schematic maps with historical data and park activities of the areas under the care of the U.S. National Park Service. Contact the particular site, or write to the Department of the Interior, U.S. National Park Service, P.O. Box 7427, Washington, DC 20013-7127.
- * Maps from the U.S. Geological Survey, the civilian mapmaking agency of the United States Government, covering a range of areas including National Wildlife Refuges to LANDSAT pictures of the Earth. For a catalog, write to the

Earth Science Information Center, U.S. Geological Survey,
507 National Center, Reston, VA 22092.

* A map of the United States showing the U.S. Wildlife Refuges. Write to the U.S. Fish and Wildlife Service, Division of Refuge, 18th and C Streets NW, Washington, DC 20204.

* Maps of water recreation areas, from the Army Corps of Engineers. Write to Department of the Army, Corps of Engineers, 2803 52nd Avenue, Hyattsville, MD 20781-1102.

* A wide selection of material is available from the National Aeronautics and Space Administration (NASA), 400 Maryland Avenue SW, Washington, DC 20546. Of particular interest are NASA Facts--Planet Earth Through the Eyes of LANDSAT 4 and Earth System Science. For a full list, ask for a copy of NASA Educational Publications.

Another source is The Map Catalog (Joel Makower, editor, and Laura Bergheim, associate editor), published in 1986 by Vintage Books of Random House. It is probably at your public library.

Magazines

Look for these magazines in your school or library:

- * Discover produced by Family Media, Incorporated;
- * World, published by the National Geographic Society; and
- * Ranger Rick and Your Big Backyard, published by the National Wildlife Federation.

Pen Pal Organizations

League of Friendship
P.O. Box 509
Mt. Vernon, OH 43050
(6 14)392-3 166

Books

Easy Reading and Picture Books:

Anderson, Lonzo. Day the Hurricane Happened. Story of what a family does when a hurricane rips through their island.

Bach, Alice. Most Delicious Camping Trip Ever. Exploits of twin bears on a camping trip.

Balet, Jan. Fence, A Mexican Tale. Illustrations help tell the story of two Mexican families.

Beskow, Elsa. Children of the Forest. A family of Tomten (small forest people) work and play through the four seasons in their Nordic home.

Brenner, Barbara. Barto Takes the Subway. Barto lives in New York City. He and his sister take a trip on the subway.

Brenner, Barbara. Wagon Wheels. Three young black brothers follow a map to their father's homestead on the Western plains.

Brinckloe, Julie. Gordon Goes Camping. When Gordon decides to go camping, his friend Marvin tells him of all the things he will need for the trip.

Buck, Pearl S. Chinese Children Next Door. A mother who had spent her childhood in China tells her children about her neighbors there.

Burningham, John. Seasons. A series of pictures that define the four seasons.

Burton, Virginia Lee. Little House. A country house is unhappy when the city with all its houses and traffic grows up around it.

Chonz, Selina. Bell for Ursli. A boy who lives in a tiny village in the mountains of Switzerland has an adventure when the spring festival comes.

Cooney, Barbara. Miss Rumphius. One woman's personal odyssey through life to fulfill her grandfather's wish that she make the world more beautiful.

Devlin, Wende and Harry. Cranberry Thanksgiving; Cranberry Christmas; Cranberry Mystery. A series of mystery-adventure

tales set on the cranberry bog shore of Cape Cod.

Dobrin, Arnold. *Josephine's Imagination; A Tale of Haiti*. Story of a young girl and her adventures in the Haitian market.

Eiseman, Alberta. *Candido*. Paco, a Peruvian boy, loves his pet llama but knows that he must find a way to train the animal to work as other llamas do.

Ets, Marie Hall. *Gilberto and the Wind*. A very little boy from Mexico finds that the wind is his playmate.

Feelings, Muriel L. *Jambo Means Hello*. A Swahili alphabet book.

Frasconi, Antonio. *See and Say, Guarda e Parla, Mira y Habla, Regard et Parle*. A picture book that gives words from four languages and prints each in a special color. Has a page of everyday expressions as well.

Garelic, May. *Down to the Beach*. Boats, birds, shells, sand, waves, tides and all the fun and wonder of the beach are pictured in simple, rhythmic prose and beautiful watercolors.

Goble, Paul. *The Gift of the Sacred Dog and The Girl Who Loved Wild Horses*. These stories, accompanied by beautiful pictures, are based on legends of the Native Americans.

Green, Norma B. *Hole in the Dike*. Retells the familiar story of the young Dutch boy whose resourcefulness, courage and finger save his country from being destroyed by the sea.

Hader, Berta. *Reindeer Trail*. The generous Laplanders bring their herds of reindeer all the way from Lapland to Alaska to help hungry Eskimos.

Hoban, Tana. *Over, Under & Through, and Other Spatial Concepts*. A picture book on spatial concepts.

Holling, Holling C. *Paddle-to-the-Sea*. Describes the journey of a toy canoe from the Great Lakes to the Atlantic Ocean.

Kessler, Ethel. *Big Red Bus*. An illustrated bus ride for the very beginning reader.

Krasilovsky, Phyllis. *The First Tulips in Holland*. Beautiful drawings about spring in Holland.

Kraus, Robert. *Gondolier of Venice*. The city of Venice is sinking into the sea, but Gregory, a proud gondolier, gets a

clever and unusual idea to help the old city.

Lamont, Bette. *Island Time*. A parent and child board the ferry that takes them to their very special island on Puget Sound.

Lisowski, Gabriel. *How Tevye Became a Milkman*. Short tale, with illustrations of the Ukrainian countryside, based on the character also depicted in *Fiddler on the Roof*.

McCloskey, Robert. *Blueberries for Sal*. *Make Way for Ducklings*. *One Morning in Maine*. Favorites from an award winning children's book author. Each describes a special journey and the difficulties in getting from one place to another.

Mizumura, Kazue. *If I Built a Village*. An idealistic picture of what a village, town and city can be ends with a small boy building with blocks.

Morrow, Suzanne Stark. *Inatuk's Friend*. Story of an Eskimo child who must move from one place to another.

Musgrove, Margaret. *Ashanti to Zulu: African Traditions*. Read and observe 26 African tribes from A to Z.

Peterson, Hans. *Big Snowstorm*. Illustrations and text picture events on a Swedish farm during a raging, January blizzard.

Rockwell, Anne. *Thruway*. As a small boy rides along a thruway with his mother, he tells of all the things he sees.

Shortall, Leonard. *Peter in Grand Central Station*. Peter takes his first trip alone, but when he gets to New York, his uncle is not there to meet him.

Skorpen, Liesel Moak. *We Were Tired of Living in a House*. Four small children pack their bags and leave home to find a new and better house.

Spier, Peter. *People*. Explores the enormous diversity of the world's population. Looks at various cultures, homes, foods, games, clothing, faces, and religions.

Van Woerkom, Dorothy. *Abu Ali: Three Tales of the Middle East*. Abu Ali is fooled by his friends, tricks them in turn and even fools himself in three humorous stories of trickery based on folklore of the Middle East.

Books to Read Aloud or for Better Readers:

Brink, Carol Ryrie. *Caddie Woodlawn*. These stories convey the flavor of pioneer life through the eyes of a little girl who lived in Wisconsin a century ago.

Bulla, Clyde Robert. *A Lion to Guard Us*. This is a story of the founding fathers of the Jamestown colony and the families they left behind in England.

DeJong, Meindert. *Wheel on the School*. Children of Shora, a Netherlands village, are determined to bring storks back to their town.

Dodge, Mary Mapes. *Hans Brinker, or The Silver Skates*. Poor Dutch children long to compete in a skating contest.

DuBois, William Pene. *The Twenty-one Balloons*. In the fall of 1883, Professor William Waterbury Sherman sets forth from San Francisco on a balloon expedition around the world.

Hansen, Judith. *Seashells in My Pocket: A Child's Guide to Exploring the Atlantic Coast from Maine to North Carolina*. A look at seashells on Atlantic Coast beaches.

Henry, Marguerite. *Misty of Chincoteague*. A story of the wild ponies that live on an island off the eastern shore of Virginia, and of one freedom-loving pony.

Kelly, Eric. *The Trumpeter of Krakow*. Mystery story centering around an attack on the ancient city of Krakow in medieval Poland.

Milne, A.A. *The House at Pooh Corner; Winnie-the-Pooh*. Christopher Robin and his friends have adventures and tell stories.

Mowat, Farley. *Owls in the family*. This is a story of the author's boyhood on the Saskatchewan prairie, raising dogs, gophers, rats, snakes, pigeons, and owls.

McNulty, Faith. *Hurricane*. This is a nature story that takes place when a family struggles against a hurricane.

Spyri, Johanna. *Heidi*. Story of a young girl who goes to live with her grandfather in the Swiss Alps. She is then taken by her aunt to live in the city and struggles to return to her grandfather.

Steig, William. Abel's Island. A mouse lives for a year in the wilderness until his wit and courage take him back home.

Wilder, Laura Ingalls. The Little House series. Documents the life of the author and her husband a century ago.

Wyss, Johann. Swiss Family Robinson. The adventures of a Swiss family shipwrecked on a desert island.

Atlases and other reference guides for young people:

Big Blue Marble Atlas. Paula Brown and Robert Garrison. Ideals Publishing group. Milwaukee. 1988.

Discovering Maps: A Young Person's Atlas. Hammond Incorporated. Maplewood, N.J. 1989.

Doubleday Children's Atlas. Jane Oliver, editor. Doubleday. New York. 1987.

Facts on File Children's Atlas. David and Jill Wright. Facts on File Publications. New York. 1987.

Life Through the Ages. Giovanni Caselli. Grossett and Dunlop. New York. 1987.

Picture Atlas of Our World. National Geographic Society. Washington, D.C. 1979.

Picture Encyclopedia of the World for Children. Bryon Williams and Lynn Williamson. Simon and Schuster. New York. 1984.

Rand McNally Children's Atlas of the World. Bruce Ogilvie. Rand McNally and Co., Inc. Chicago. 1985.

Rand McNally Student's World Atlas. Rand McNally and Co. Chicago. 1988.

Usborne Book of World Geography. Jenny Tyler, Lisa Watts, Carol Bowyer, Roma Trundle and Annabel Warrender. Usborne Publishing, Ltd. London. 1984.

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