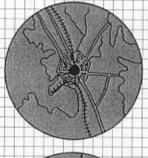


K-6 GEOGRAPHY



THEMES, KEY IDEAS, and LEARNING OPPORTUNITIES



Published by the Geographic Education National Implementation Project (GENIP)

With the Cooperation of Rand McNally & Company

The Geographic Education National
Implementation Project Under
The Sponsorship of
The American Geographical Society
The Association of American Geographers
The National Council for Geographic
Education
And
The National Geographic Society

Wish To Gratefully Acknowledge That This Publication Is Made Possible In Part By A Grant From

Rand McNally & Company
Educational Publishing Division
Skokie, Illinois

K - 6 GEOGRAPHY

Themes, Key Ideas, and Learning
Opportunities
Prepared for the
Geographic Education National Implementation Project

INTRODUCTION

This document provides key ideas and learning opportunities associated with the major themes of geographic education. The statements have been designed to include various levels of thinking and to direct attention to knowledge, skills, and attitudes in geographic education at the elementary level.

This document can serve as a model by which curricula can be evaluated for the important elements of geographic learning in existing programs. The learning opportunities will assist educators at state, provincial, and local levels in the preparation of curriculum guidelines, resources, and support materials for programs in geographic education. The learning opportunities assume that growth in both scope and sequence will occur within and across the grades.

The materials in this document are based upon Guidelines for Geographic Education published by the Joint Committee on Geographic Education of the National Council for Geographic Education and the Association of American Geographers. The Guidelines focus on five central themes:

LOCATION: Position on the Earth's Surface

Absolute and relative location are two ways of describing the positions of people and places on the earth's surface.

PLACE: Physical and Human Characteristics

All places on the earth have distinctive tangible and intangible characteristics that give them meaning and character and distinguish them from other places. Geographers generally describe places by their physical or human characteristics.

RELATIONSHIPS WITHIN PLACES: Humans and Environments

All places on the earth have advantages and disadvantages for human settlement. High population densities have developed on flood plains, for example, where people could take advantage of fertile soils, water resources, and opportunities for river transportation. By comparison, population densities are usually low in deserts. Yet flood plains are periodically subjected to severe damage, and some desert areas, such as Israel, have been modified to support large population concentrations.

MOVEMENT: Humans Interacting on the Earth

Human beings occupy places unevenly across the face of the earth. Some live on farms or in the country; others live in towns, villages or cities. Yet these people interact with each other: that is, they travel from one place to another, they communicate with each other or they rely upon products, information, and ideas that come from beyond their immediate environment.

The most visible evidence of global interdependence and the interaction of places are the transportation and communication lines that link every part of the world. These demonstrate that most people interact with other places almost every day of their lives. This may involve nothing more than a Georgian eating apples grown in the state of Washington and shipped to Atlanta by rail or truck. On a larger scale, international trade demonstrates that no country is self-sufficient.

REGIONS: How They Form and Change

The basic unit of geographic study is the region, an area that displays unity in terms of selected criteria.

We are all familiar with regions showing the extent of political power such as nations, provinces, countries, or cities, yet there are almost countless ways to define meaningful regions depending on the problems being considered. Some regions are defined by one characteristic such as a governmental unit, a language group, or a landform type, and others by the interplay of many complex features. For example, Indiana as a state is a governmental region, Latin America as an area where Spanish and Portuguese are major languages can be a linguistic region, and the Rocky Mountains as a mountain range is a landform region. A geographer may delineate a neighborhood in Minneapolis by correlating the income and educational levels of residents with the assessed valuation or property and tax rate, or distinguish others by prominent boundaries such as a freeway, park, or business district. On another scale we may identify the complex of ethnic, religious,

linguistic, and environmental features that delineate the Arab World from the Middle East or North Africa.

The sequence of themes does not imply any order for instruction. Where appropriate they may be taught together or in any other manner dictated by the needs of the learners. A glossary of selected terms follows the text.

Geographic education at the elementary school level is based upon existing knowledge of the stages of childrens' cognitive, psychological and social development as well as key geographic understandings. The rich and varied life experiences of children should be used as much as possible to illustrate and develop the learning opportunities selected for study. Use of the learning opportunities requires that they be adapted to meet local objectives and at particular grade levels in ways which meet the needs of children with varying experiential backgrounds, and differing language and intellectual abilities.

These materials were developed for the Geographic Education National Implementation Project by a committee consisting of:

Walter G. Kemball (Chairperson)
W. Kemball Curriculum Consultants
2279 Shardawn Mews
Mississauga, Ontario
L5C 1W6

James N. Hantula University of Northern Iowa Price Laboratory School Cedar Falls, Iowa 50613

Eugene N. Miller
Social Studies Consultant
Board of Education for the City of York
2 Trethewey Drive
Toronto, Ontario
M6M 4A8

Joseph P. Stoltman Department of Geography Western Michigan University Kalamazoo, Michigan 49008

Barbara J. Winston Department of Geography and Environmental Studies Northeastern Illinois University Chicago, Illinois 60625

This document was examined by the following official review committee of the Geographic Education National Implementation Project:

Professor Joseph M. Cirrincione Department of Geography University of Maryland College Park, Maryland 20742

Ms. Esther Iron 127 Ava Road Toronto, Ontario M6C 1W2

Dr. Dana Kurfman 10711 Trafton Drive Upper Marlboro, Maryland 20870 Ms. Pat Robeson Beltsville Elementary School 4300 Wicomico Drive Beltsville, Maryland 20705

Dr. Ruth I. Shirey
Department of Geography and
Regional Planning
Indiana University of
Pennsylvania
Indiana, Pennsylvania 15705

The Committee wishes to express its sincere appreciation to the many other contributors who spent time and effort in assessing this material during its developmental stages.

PROGRAM OVERVIEW

CENTRAL FOCUS	K Self in Space 1 Homes/Schools in Different Places 2 Neighborhoods in Communities 3 Communities 4 The State/Province, Country, and World 5 North America (United States, Canada, Mexico) 6 South America, Eurasia, Africa
ТНЕМЕ	KEY IDEAS
Location: Position on the Earth's Surface	Location of places can be described using relative terms. Location of places can be described using reference systems. Reasons can be identified for the location of places.
Place: Physical and Human	Places have physical characteristics.
Characteristics	Places have human characteristics. Places may be described or represented in different ways.
Relationships Within Places: Humans and Environments	Relationships within places include how people depend on the environment. Relationships within places include how people adapt to and change the environment. Relationships within places include the impact of technology on the environment.
Movement: Humans Interacting on the Earth	Movement demonstrates interdependence. Movement involves linkages between places. Patterns of movement involve people, ideas, and products.
Regions: How They Form and Change	Regions are a way to organize information. A region has common characteristics. Regions change.

All themes and key ideas can be introduced in any order at each grade level. They increase in sophistication as the grade level increases. Concepts and skills are introduced at an early level and become refined and honed through practice and use at successive levels of the curriculum. The geographical scale of the themes and key ideas will vary according to the central focus at any particular level of the curriculum. All schools may not follow the general sequence of central foci listed above. You may use key ideas appropriate for your topical sequence.

Geographic Education National Implementation Project

1710 Sixteenth Street, N.W. Washington, D.C. 20009 202-234-1450

The Project

In 1984 a joint committee of the National Council for Geographic Education and the Association of American Geographers published the Guidelines for Geographic Education: Elementary and Secondary Schools. This 28 page booklet was designed to inform educational decision makers about the need to institute, update, and enrich geography programs in America's schools. The guidelines address the growing problem of geographical illiteracy in our society and provide a blueprint for developing a sequence of programs that will improve the teaching and learning of geography in the elementary and secondary schools.

Acting upon the favorable public response to the Guidelines, the National Council for Geographic Education (NCGE) and the Association of American Geographers (AAG) agreed to combine their efforts to implement the recommendations of the Guidelines nationwide. The American Geographical Society (AGS) and the National Geographic Society (NGS) joined with the NCGE and the AAG to form the Geographic Education National Implementation Project (GENIP) on July 1, 1985. The GENIP is a national project to improve the status and quality of geographic education in grades K-12 in the United States. This publication is one of the GENIP activities designed to implement the Guidelines by promoting geographic education.

• 1987 Geographic Education National Implementation Project (under the sponsorship of the American Geographical Society, the Association of American Geographers, the National Council for Geographic Education and the National Geographic Society)

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Describe position of themselves relative to other persons or objects, e.g., I am next to Joe; Jean is in the middle of the circle.
- Estimate distances between objects, e.g., How many steps is it to Joe or Jean? How many steps is it to the desk that is near to me?
- Use pictures to describe relative location of objects, e.g., What is under the table? What is next to the book?
- Map the relative locations of facial features using paper plates, paper, crayons, paint, and yarn.
- Map the relative location of body parts by tracing around the body outline.
- Draw pictures of the classroom and talk about objects that are near to or far from another.

Location of places can be described using reference systems.

- Face different locations in the classroom, e.g., respond to instructions such as: point up/down; left/right; take two steps toward/away from me.
- Point out directions on a model or picture e.g., up/down; left/right.
- Follow directions in physical education lessons, e.g., form individual or group body shapes by moving up/down; left/right.

Reasons can be identified for the *location* of places.

- Give reasons for the present organization of the classroom. Rearrange the classroom as a basis for discussion and evaluation.
- Give reasons why plants are on the windowsill.
- Give reasons why some pets are in cages.
- Hypothesize why fire drill instructions are near the door.
- Hypothesize why a crosswalk is near the school.
- Evaluate several locations in the classroom to find a place to locate a new bookcase.
- Evaluate different locations for a new flag pole.
- Evaluate several places in the classroom to locate a new bookcase, a TV, a screen.

Grade K

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Describe how places look between home and school, e.g., hilly, flat, a river, trees.
- Use pictures to compare physical features of different places including the school grounds.
- Use a sandbox to make a model showing physical features.
- Describe physical features seen on a field trip or a vacation, e.g., rivers.
- Talk about daily changes in the weather and changes in the seasons.

Places have human characteristics.

- Describe how places look between home and school, e.g., streets, stores, houses.
- Identify different human features using pictures.
- Compare human features of different places around the world using photographs.
- Describe human features seen on a field trip or a vacation.
- Add buildings, roads, and bridges to a sandbox model of physical features.
- Identify different parts of the school and describe their uses.
- Draw pictures of the school and use its name as a title.
- Use pictures to compare classrooms of today and long ago.
- Record changes in the neighborhood through pictures or photos.

Places may be described or represented in different ways.

- Describe sizes of objects and places using terms such as big/little, tall/short, large/small.
- Describe shape of geometric models using terms such as round (ball shape), square (box shape).
- Sort real objects based on geometric shapes.
- Use a globe to point out land and water.
- Use a globe to point out continents and oceans.
- Describe places that are fun to visit.
- Describe what it would be like to live in a city.
- Describe what it would be like to live on a farm.
- Describe places that seem frightening or happy and tell reasons why.
- Compare real objects and models, e.g., cars, animals, buildings, trees, mountains.

Central Focus: Self in Space

• Sketch pictures of real places and describe how pictures are similar to and different from the real place.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Learning Opportunities

Relationships within places include how people depend on the environment.

- Describe, using pictures, how land is used, e.g., food production on farms, buildings, and cities.
- Describe, using students' own experiences or pictures, how water is used, e.g., boating, fishing, drinking, sprinkling the lawn.
- Describe, using pictures, how air is used, e.g., an astronaut, a diver, clean and polluted air.

Relationships within places include how people adapt to and change the environment.

- Draw a picture of ways people could improve the neighborhood, e.g., plant flowers or pick up litter.
- Make improvements to the classroom, e.g., tidy up, plant flowers.
- Draw pictures of people dressed for snow, beach, and for watching TV.
- Describe, using pictures in books and magazines, how seasons relate to the ways people dress and seasonal activities they engage in, in different areas of the world.
- Describe ways in which people have made changes through heating and air conditioning.
- Verbally describe the parts of the school building that provide comfort and protection from the outside weather.

Relationships within places include the impact of technology on the environment.

- Look or sit outside, and use pictures to identify things which might change or harm the environment.
- List things in the class, home, and neighborhood which create noise or danger.
- Tell a story about what life would be like without cars, television, or electricity.
- Organize a series of pictures to show changes from forest to farm land.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

• Name places outside the home community where family members have shopped.

Grade K

Movement involves linkages between places.

- Tell stories about places for working, playing, and learning.
- Visit school helpers and have them describe their jobs.
- Draw pictures of people who are school helpers.
- Tell stories about a trip to visit a relative.
- Tell stories about personal travel on a car, truck, bus, subway, train, airplane or boat.
- Use pictures to identify and describe different types of transportation.
- Draw pictures of cars, trains, trucks, boats, and airplanes, and describe what is going on in the picture.
- Draw pictures that show train tracks or streets and describe their use.
- Describe the way from home to school.

Patterns of *movement* involve people, ideas, and products.

- Take a walk or bus ride to places in the neighborhood and then tell about it.
- Tell stories about something you learned from family members, friends, or television.
- Compare trips you take and souvenirs you bring back from them.

Theme

Regions: How They Form and Change

Key Ideas

Learning Opportunities

Regions are a way to organize information.

- Draw a picture or mural, or model a neighborhood with homes using tabletop models, sandtables, blocks or boxes.
- Draw a map of the classroom and talk about its parts.

A region has common characteristics.

- Draw a picture or mural, or model a place with stores and offices.
- Draw a picture of your school and identify the location of your classroom.

Regions change.

• Tell ways that shopping areas and neighborhoods change.

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Draw pictures to show the positions of objects relative to each other, e.g., above/below, left/right.
- Describe the location of home and its relation to the school.
- Represent and describe locations of places relative to other places using models and maps, e.g., school, play field, home, shopping center.

Location of places can be described using reference systems.

- Follow and give verbal directions such as here/there, over/under, left and right.
- Respond to verbal instructions involving directions, e.g., play "Simon Says" and point to left/right, or up/down when told to do so.
- Use a nursery rhyme to sketch a map, e.g., Jack and Jill.
- Tell or print home addresses and compare street numbers, names and zip codes.
- Name the directions, left and right, to go from one point in the school to another.
- Name the home city or town and point to it on a map and a globe.
- Name the directions North, South, East, and West in the classroom.

Reasons can be identified for the location of places.

- Observe and suggest reasons for the location of stop signs and stop lights.
- Suggest reasons for the location of the main office in the school.
- Suggest reasons for the location of fire hydrants.
- Suggest reasons for the location of fences.
- Suggest a place in the school to hang a plaque or student art work.
- Decide which places in the classroom/school should be for quiet and for noisy activities.

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Compare physical features in the local area to those in pictures of other places.
- Point out continents (land) and oceans (water) on a globe and a map and in the local area.

Grade One

- Compare ways a physical feature is shown on a picture, a model and a map.
- Talk about the uses of symbols.
- Talk about symbols in the environment, e.g. warning symbols, street symbols, logos.
- Match the correct label with scenes or descriptions of an environment during different seasons.
- Draw a picture of changes in a tree during the four seasons.
- Take photographs, make collages and murals, and keep scrapbooks throughout the year to note main differences among seasons.
- Describe and explain how the environment changes as seasons change in the local area.
- Name places or objects passed on a route between the classroom and other school places.
- Name places or objects passed on a route to school from home.
- Compare the appearance of schools and places around the world, using pictures.
- Compare buildings from long ago and today using pictures or a visit to a pioneer museum.
- Compare ways a human feature is shown on a picture, a model, and a map.
- Take a walk and draw pictures of the types of homes in the community, e.g., tall buildings, low buildings, one, two and three story apartments.
- Make a photo survey of your community.
- Create a community with blocks, box sculpture or sandbox.
- Tell ways in which places in the local area are similar and different.
- Use pictures to identify similarities and differences in building materials used from place to place.
- Collect samples of building materials.

Places may be described or represented in different ways.

- Describe ways that a globe and the earth are similar and different.
- Identify a globe as a model of Earth when matching other models with real objects they represent.
- Create bird's eye view maps, e.g., desk, table, classroom.
- Examine air photos of the school area.
- Tell how a map uses an overhead perspective, map symbols to represent real things, a key to explain symbols, and a title.
- Use a map to locate and classify classmates' homes as near or far and closest to school and farthest from school.

Places have human characteristics.

Central Focus: Homes and Schools in Different Places

• Use a map of the local area to estimate and classify distances between places, e.g., near/far, nearer/farther, nearest/farthest.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Learning Opportunities

Relationships within places include how people depend on the environment.

- Identify common needs of children throughout the world.
- Identify common needs of people in different parts of the world, e.g., food, clothing, and shelter, and use pictures and stories to show how the needs are met.
- Make a chart to show ways all people depend upon air, water, and land.
- Use pictures to compare ways the physical environment is used to meet needs, e.g., cutting trees, mining.

Relationships within places include how people adapt to and change the environment.

- Describe seasons and how they affect people at work, at home, or at play.
- Tell stories about how different groups of people in the world respond to the environment to meet needs, e.g., use of materials for buildings, types of clothing, types of crops.
- Observe, describe, and record changes in the local environment over time.
- Take a block walk and use pictures to list ways people change the natural environment.

Relationships within places include the impact of technology on the environment.

- Identify and visit places where people create environments, e.g., a greenhouse, a swimming pool, an indoor sports stadium.
- Use magazines to create scrapbooks and collages of tools in the school and home that make it easier for people to use the environment.
- Find pictures that show harmful things in the environment.
- Use pictures and stories to see how tools and machines are used by people to obtain resources and change the natural environment in all parts of the world.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

• List the people that students depend upon within and outside the home, e.g., relatives, friends, farmers, factory workers, government workers.

Grade One

Movement involves linkages between places.

- Draw pictures of places students depend upon outside the home, e.g., farms, lakes, forests, other cities.
- List things that come into the neighborhood from other places.
- Use maps to point out symbols for highways, railways, and airports.
- Talk about how highways, railways, and airlines tie people together.
- Use maps to propose and evaluate routes for field trips or individual students' trips.
- Draw maps of trips from home to outside activites.
- Make a chart listing several ways to travel from one place to another.

Patterns of *movement* involve people, ideas, and products.

- Describe the routes students follow to go from home to school and nearby places.
- Find pictures of different modes people use to move themselves and products.
- Use a map to point out a route from home to school.
- Use a map to point out a route from school to other places in the neighborhood.
- Take a survey to determine the ways adults and students travel to and from school.
- List the advantages and disadvantages of two different routes between school and home.

Theme

Regions: How They Form and Change

Key Ideas

Regions are a way to organize information.

- Learning Opportunities
- Use a map to find symbols showing where people live and where they do not live.
- Use a map of the local area to identify places children went in the last week/month and draw a line around the area.

A region has common characteristics.

• Describe places that are similar, e.g., stores in a mall, and places that are different, e.g., cities and farms.

Regions change.

• Use photographs to describe ways that the local area has changed.

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Use a map to identify the relative location of places in the neighborhood, e.g., "The school is next to the park."
- Use maps to identify the relative location of places outside the neighborhood, e.g., "The city is next to the lake." "That place is on a river."
- Build models and draw maps to represent the location of places relative to other places.

Location of places can be described systems.

- Describe locations of places using a neighborhood street map or aerial photo, using reference e.g., "There are four houses on Front Street." "My friends live on Main Street."
- Use cardinal directions to orient one's self as well as maps and models.
- Use a direction indicator to show and read directions on a map.
- Describe the location of places using cardinal directions and the intersection of two streets.
- Make a directory of students' home addresses.
- Place pins on a street map of the community to show the locations where students live.
- Draw maps of fairy tales such as Jack and the beanstalk, e.g., How did Jack get to the castle?

Reasons can be identified for the *location* of places.

- Brainstorm reasons why places are located where they are, e.g., airports outside the city; hotels in downtown areas.
- Make and test guesses about the location of major activities in your neighborhood, e.g., church, shopping, schools, parks.
- Compare locations in the neighborhood to select the best place for a newspaper collection station.

Grade Two

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Use pictures and maps to distinguish between land and water.
- Identify continents and oceans on a globe and world maps.
- Describe landforms and water bodies in the local area, e.g., plain, river, valley, hill.
- Identify mountains, hills, plains, islands, lakes, and rivers on maps and pictures.
- Make a model of an imaginary country/ island using the sand table.
- Observe and record the number of daylight hours during different times of the year.
- Use observation and pictures to compare weather in a place during different seasons.
- Tell or print a story or poem to describe feelings about the physical environment, e.g., forests, beaches, snow-covered hills or your favorite area in the neighborhood.

Places have human characteristics.

- Identify features in the neighborhood that were built by people.
- Distinguish physical features from those that were made by people, using maps and photographs.
- Create your own country as a total class, or in groups. What will you include?
- List and compare classmates' feelings about places people build, e.g., busy city streets, tall buildings, shopping centers, parks.
- Describe ways the neighborhood has changed over time, using maps and pictures.
- Predict how an area might be made more attractive in the future and draw a picture to show it.

Central Focus: Neighborhoods in Communities

 Select one area of your neighborhood and tell why you like it.

Places may be described or represented in different ways.

- Find place names in the local area that describe physical features, e.g., Ocean Drive, Grand Rapids.
- Compare the appearance of land and water bodies on a picture, a globe, and on a map.
- Compare advantages and disadvantages of maps and globes for finding information.
- Use pictorial symbols and color to make simple maps. Make a key to show what the symbols represent.
- Find poems or songs that describe how people feel about places.
- Draw a picture of your neighborhood. Make a map of the neighborhood that you have drawn.
- Tell a story to describe how a child from another part of the world might feel about your neighborhood.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Learning Opportunities

Relationships within places include how people depend on the environment.

- Draw or find pictures showing ways that people depend on the natural environment.
- Differentiate between a "need" and a "want".
- Identify common needs of people everywhere, and use pictures and stories to show how needs are met.
- Compare ways students and other people use the physical environment to meet their needs.
- Identify ways the physical environment is used in your neighborhood, e.g., gardens, parks.

Relationships within places include how people adapt to and change the environment.

- Observe responses of people to changing seasons, e.g., dress, recreational activities.
- Decide whether empty land in your community should be used or left alone. If it is to be used, draw pictures to show how.

Grade Two

- Observe and describe ways the school neighborhood might be changed to improve its appearance or make it safer.
 Tell why particular changes were made.
- Initiate a class project to improve something in your neighborhood.

Relationships within places include the impact of technology on the environment.

- Identify, using pictures and stories, tools and machines that are used by people to change the physical environment.
- Compare tools used to change the environment long ago and in modern times.
- Visit a pioneer museum to see old-fashioned tools.
- Make a chart listing advantages and disadvantages of building a new highway through the neighborhood.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

- List people that students depend on within and outside the neighborhood, e.g., relatives, friends, farmers, factory workers, government workers.
- Identify places that people depend on outside the neighborhood, e.g., farms, lakes, forests, cities.
- Tell or print a story about how people depend on farms for food and on factories for products made there.
- Tell about places students and their families visit for recreation.
- Describe places family members travel to in order to do their work.
- List activities and products you have to leave your neighborhood to obtain. Locate the places you visit on a map of the local area.

Movement involves linkages between places.

- Identify symbols on maps for railroads, roads, highways, and airports.
- Describe, using maps, patterns of streets or railroad lines in the neighborhood.

Central Focus: Neighborhoods in Communities

- Trace on a map a route that was taken in the last year by highway or railroad.
- Discuss the types of maps used to gain information and make a class collection of the various types.
- Draw several kinds of vehicles that could be used to travel from one point to another in the neighborhood.
- Make a list of trips taken in the last two weeks and identify the variety of vehicles used.
- Draw pictures of workers who help keep streets clear so that traffic moves smoothly.
- Evaluate advantages and disadvantages of using a bicycle, car, bus, boat, or train as a means of travel.

Patterns of *movement* involve people, ideas, and products.

- Compare routes and vehicles used to move people and products today and long ago.
- Identify children and adults who have moved to the neighborhood from other places, and map the places.
- Tell about holidays students celebrate that are also celebrated in other parts of the world and use maps to show the other locations.
- Keep a record of sports scores and locations of games, or other news reported in newspapers or other media.
- Name foods and other goods in the home that come from places beyond the neighborhood.
- Interview workers who help move people and products in and out of the neighborhood.
- Make a list of trips taken in one week and categorize them as follows: visits, school/work, shopping, to see/hear something.

Theme

Regions: How They Form and Change

Key Ideas

Learning Opportunities

Regions are a way to organize information.

 Use a map to draw a boundary, or border, around a neighborhood as individual students choose to define its limits.

Grade Two

A region has common characteristics.

- Compare students' perceptions of the limits of a neighborhood with those of sixth graders.
- Analyze what a neighborhood is.
- Identify ways in which places in the neighborhood are alike.
- Make a list of ways the neighborhood is different from a business district in the community.
- Compare ways in which the students' neighborhood is similar and different from other neighborhoods in the community.

Regions change.

- Use maps and pictures to identify changes in the neighborhood over time.
- Draw pictures to show ways that students would like the neighborhood to change in the future.

Central Focus: Communities

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Use a map to point out the location of the community, state/province, country, and continent relative to other places.
- Use a globe to locate the community, state/province country and continent relative to other places.
- Use cardinal and intermediate directions to describe the relative location of places, e.g., Dallas is west of our community.
- Draw a map that shows the location of several landmarks in the community relative to the school.

Location of places can be described using reference systems.

- Use directions and direction indicators on maps of the community, state/province and country.
- Enter points on a number/letter grid reference system.
- Locate places on a map which has a number/letter grid reference system.
- Use maps of the school, neighborhood, and community, to design several different kinds of reference systems and evaluate their ease of use and accuracy, e.g., place an acetate overlay on the map surface to test several different systems of reference.

Reasons can be identified for the *location* of places.

- Identify on a map of the local community, attributes of the physical environment which made it an attractive location, e.g., near a river, on a natural harbor.
- Compare, on a map of the local community and a nearby community, attributes of the physical or human environment which may have affected their location, e.g., near a railway, near a highway.
- Refer to a map of the local community to decide where a new shopping center should be located, e.g., along a major street, in a neighborhood with houses, near other businesses.
- Make models of a "dream" community.

Grade Three

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Identify and distinguish physical features such as landforms and water bodies in the community, using observations from bus rides, walks to school.
- Select pictures or diagrams which show the landforms and water bodies located in the community.
- Draw a sketch map of the community which shows the physical characteristics of the place.
- Compare photographs or maps of the community with those of another community to determine differences in size, shape, and site, e.g., elongated to follow a river, railway, highway, or valley; river site, bay site.
- Interpret a diagram that shows the earth's rotation on its axis to explain the causes of day and night.

Places have human characteristics.

- Identify and describe the characteristics of people in the community, e.g., age composition, ethnic groups.
- Identify and describe the characteristics of the human landscape in the community, e.g., places people build.
- Examine phone books, community directories or newspapers to compare services provided by several communities.
- Compile a list of the services which people need and where they are located to be near people in your community, e.g., medical, police, fire protection.

Places may be described or represented in different ways.

- Analyze what a community is.
- Define a community as a place with many neighborhoods and places where people live, work, and play.
- Classify cities, towns, and suburbs as examples of communities.
- Determine different ways the community can be distinguished from other communities, e.g., as a governmental unit, with its own central business district, by its borders, with its own services and types of employment.

Central Focus: Communities

- Compare, through interviews, the ways in which three different people view the community, e.g., a delivery person, postal worker, police officer, teacher.
- Write a paragraph describing the community, its activities, weather, and appearance on a specific day. Reread the description two months later and summarize the changes in the community during that time. Tell why changes have occurred.
- Evaluate the usefulness of maps drawn at different scales to answer questions about a place.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Learning Opportunities

Relationships within places include how people depend on the environment.

- Select pictures from a series which show people using the environment to meet their needs, e.g., people cutting trees in a forest.
- Compare ways in which people in urban and rural communities meet their needs from the environment.
- Combine several lists which show similar ways in which people use their environment to meet their needs in several different kinds of communities.
- Identify the major types of environments used by your community for jobs and resources, e.g., fishing, farming, recreation.

Relationships within places include how people adapt to and change the environment.

- Explain how climate may influence the way people dress, what they do for recreation, and the types of houses they build.
- Compile a list of the ways urban and rural people change the environment to meet their needs.
- Draw a series of maps to show ways the physical environment has changed in the community, e.g., use symbols on the map to show how the community looked when it was first settled, the ways the early residents changed the environment, how the development of the community changed the environment, and finally how the community looks today.
- Visit a pioneer community and draw a map of it.

Grade Three

Relationships within places include the impact of technology on the environment.

- Observe and record the ways in which electric lines, overhead cables, towers, and advertisement signs affect the appearance of the environment.
- Develop a classroom chart listing pollution problems, ways that technology may have helped cause them, and the ways that technology may offer solutions to them.
- Use photographs or newpaper articles to list the ways which changing technology has brought about both large and small changes in the community, e.g., a new airport or super-highway, solar collectors on buildings, or the widening of streets to carry more automobile traffic.
- List the ways which transportation has changed in the community over time and how each change has affected the environment, especially land use and noise.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

- Identify ways in which individuals depend upon others in the community, e.g., for food, water, protection, education.
- Identify ways in which the community depends upon other communities to provide it with certain goods and services, e.g., electric power, frozen vegetables.
- Develop a list of places shown on local television or included in newspaper articles to demonstrate how the community depends upon the media for information.
- Locate, on country and world maps, natural areas such as forests and grasslands and list products which come from those places to the community.
- Locate, on state/provincial, national, and world maps, areas that depend on the human and physical resources of your community.
- Have group discussions about what life in the community would be like if there were no transportation or communication with other places for three days.
- Movement involves linkages between places.
- Locate and map places where agriculture, manufacturing, or recreation is an activity on which the community depends, e.g., a farm community, an industrial community, a tourist center.

Central Focus: Communities

- Use an outline map of the country or world, to show which products move from one place to another and how they are moved, e.g., coffee, bananas, iron ore, wheat.
- Classify the types of communication and transportation which permit places to be linked together.
- Show on a map the way the community is linked to other places by different means of communication and transportation.
- Use a road map to trace and describe a route.

Patterns of *movement* involve people, ideas and products.

- List the places where students' household members travel and classify the places by category, e.g., work, recreation, health care and distance away from the household, e.g., miles, kilometers, travel time.
- Evaluate several ways available in the community to send a message to another place within one week's time, one day's time, and one hour's time for delivery.
- Interpret a bus, train, or air travel schedule to determine travel times between the home community and other places.
- Listen to a nightly news report on TV to locate places mentioned.
- Map the locations of "datelines" in newspapers on a world map.
- Use a linear scale to measure distances between places.
- Use scale and mileage markers on a road map to compare road distances to straight line distances.

Theme

Regions: How They Form and Change

Key Ideas

Regions are a way to organize information.

Learning Opportunities

- Draw a boundary, or border, around a map of the community following the established political boundaries.
- Point out the political boundaries for the community and identify ways in which the region shares common characteristics, e.g., one name, one mayor, one bus system, where people pay their taxes to one governmental unit.

Grade Three

- Locate, on a map, the place where each student in the class lives and enclose all the places with a boundary which identifies it as the residential or home region for the class.
- Compare old and new maps of urban and rural areas to describe their changing characteristics and list those changes in a table.
- Use various sources, including readings, films, television programs, and interviews to make inferences about changes in urban and rural places.
- A region has common characteristics.
- List items which help define the community, e.g., public safety department, street department, water department, school board.
- Make a list of the ways the community is different from the surrounding area or a nearby region.
- Show, on a map, the political districts used in community elections, e.g., precincts, voting districts.
- Analyze the advertisement pages in a telephone book to determine if the community is part of the market region of an out-of-town store.
- Compare older maps with newer maps of the community to determine how boundaries have changed.
- Write a paragraph about changes that have occurred in the community which give it a different or changed regional focus, e.g., a new shopping center, a regional hospital.
- Prepare interview questions for local business people, to determine what the market region is for a local product. Invite a guest speaker to class to discuss why businesses and products have market regions.
- Prepare interview questions to determine the employment activities of parents in local and/or distant markets.

Regions change.

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Define the terms state/province, country, and world.
- Describe locations of places in the community such as a central business district, an airport, a government building, a hospital, church, or school.
- Describe the location of states/provinces relative to each other.
- Describe the location of countries relative to the locations of other countries.
- Locate places relative to physical features, e.g., New York City is on the Atlantic Ocean.
- Locate the positions of continents and oceans relative to each other.

Location of places can be described using reference systems.

- Point out the North and South Poles, the Equator, the Tropics of Cancer and Capricorn, and the Arctic and Antarctic Circle, on world maps and globes.
- Identify these same reference points on maps centered on the equator and on each pole.
- Identify and define various hemispheres on maps and globes.
- Use maps and globes to classify locations in hemispheres.
- Point out major parallels and meridians on maps and globes.
- Use a number/letter grid system to locate places on maps.
- Use latitude and longitude to identify the location of places on maps and globes.
- Give the latitude and longitude of places in the state/province, country, and world.

Reasons can be identified for the *location* of places.

- Describe some factors that helped influence the location of a particular town or city.
- Describe factors that help influence the growth and development of a city, a manufacturing area, a resort, or a transportation system.
- Evaluate advantages and disadvantages of particular places for business or other activities.
- Compare the locations of capital cities and note the particular locations which occur most frequently.

Grade Four

• Analyze reasons for the locations of major economic activities, population groupings, or transportation systems, in the state/province, country, and the world.

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Recognize continents by their outlines and define their characteristics.
- Define the characteristics of major landforms, e.g., mountains, hills, plateaus, and plains.
- Describe characteristics of oceans, seas, bays, gulfs, lakes, and river systems.
- Use maps to locate major mountain ranges, hills, plateaus, and plains, in the state/province, country, and the world.
- Locate, on maps, major water bodies and river systems in the state/province, country, and the world.
- Obtain information from maps to describe climate, natural vegetation, and resources.
- Develop a system of classification and describe features of climate, natural vegetation, and resources.
- Interpret a diagram to describe the earth's tilt and revolution around the sun, and relate these factors to changes in seasons.
- Compare climate conditions in selected states/provinces, countries, and places in the world.
- Describe physical characteristics of places from data on maps, aerial photographs, charts, tables, pictures, and graphs.
- Evaluate the effect a city's physical location on a coastline, along a river, on a lake, or near a mountain range, might have on its development.
- Evaluate the effects of the climate on your community, and state/province, e.g., agricultural activities, use of fuels, recreational activities.
- Define human characteristics as those ways that people change the landscape.
- Locate major cities in the state/province, country, and the world, on maps and globes.
- List recreation activities that are confined to specifically planned surfaces, e.g., tennis, baseball, football.

Places have human characteristics.

Central Focus: The State/Province, Country and World

- Describe, using maps, characteristics of populations in the local area, state/province, country, and world, e.g., distribution, density.
- Compare characteristics of urban and rural areas in terms of human features.
- Compare characteristics of places used for farming, mining, manufacturing, forestry, fishing, and recreation.
- Use a variety of sources to prepare advertisements designed to attract people to a place.
- Evaluate the development of a state/province relative to its supply of resources.

Places may be described or represented in different ways.

- Use symbols to represent places in the state/province, country and the world on maps.
- Classify a description of a place as fact and/or opinion.
- Collect and analyze childrens' varying perceptions of places as fact and/or opinion.
- Develop a classification system and classify ways in which places may change over time, e.g., buildings, activities.
- Select, from maps drawn to different scales, the one most useful to describe the characteristics of a place.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Learning Opportunities

Relationships within places include how people depend upon the environment.

- Define resources as those things that are valued and used by people.
- Define the term environment as everything in and on the earth and its atmosphere.
- Identify resources whose value has changed over time as technology has changed.
- List ways in which people depend upon and use the environment, e.g., climate, natural vegetation.

Relationships within places include how people adapt to and change the environment.

- Describe landforms using a map or aerial photo, and relate them to ways people may use the land to work and play.
- Map one agricultural product that is usually grown in an area of low population density and explain why.
- Identify, using maps, areas with high population densities and give reasons to explain these concentrations.
- List outdoor activities that are undertaken in large, open areas, e.g., sledding, horseback riding.

Grade Four

- List ways in which people have adapted to their environment, e.g., clothing, housing.
- Describe, using maps and photos, how you would change the environment of an area for different types of activities.
- Analyze maps, photos, and the local environment to see ways people use, abuse, and protect resources.
- Discuss the types of action that may be taken in response to environmental abuse, e.g., letter writing by the pupils.
- Relate agricultural and recreational patterns to climate.
- Evaluate the role of leisure time in creating modifications of the environment, e.g., clearing slopes for ski runs, developing golf courses, jogging and bicycle paths, and litter.
- Explain changes in farming practices, e.g., irrigation in dry regions, shifting cultivation.
- Evaluate alternative perspectives about use of land and water, e.g., mineral or resource exploitation, waste dumping.
- Evaluate major changes that have occurred in the local area in the past few years, e.g., parking lots, shopping plazas, wildlife refuges.
- Examine maps and photographs to see the different uses made of similar environments by various groups of people.
- Collect newspaper articles and make class or individual scrapbooks related to any of the previous topics.
- Note, through the use of maps and aerial photographs, how transportation systems change the landscape.
- Identify an environmental issue and chart its effects on the local area, state/province, country and the world, e.g., acid precipitation, use of fertilizers, soil erosion, waste disposal.
- Conduct a class debate on an environmental issue.
- List devices found in indoor and outdoor environments and explain how they affect those environments, e.g., air conditioning, snow making machines, bulldozers.
- Evaluate effects of technological change on transportation and communications in the country and the world.
- Maintain charts of technologies that affect people and environments, e.g., medical discoveries, automation communication satellites, cars.
- List advantages and disadvantages of various technologies.
- Identify ways that behavior could be changed to solve a particular environmental problem, e.g., outline a plan to reduce litter, clean up public areas.

Relationships within places include the impact of technology on the environment.

Central Focus: The State/Province, Country and World

 Examine an environmental stress zone (fragile environments), e.g., the rainforests of Brazil, taiga, north slope of Alaska, and identify the causes and nature of changes in the environment.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

- Find evidence that many basic needs can be met by shopping locally while others may only be fulfilled in special settings.
- Collect labels from imported foods and graph the number from other countries, and from other locations within the country.
- List products in the home and map the locations where they are manufactured.

Movement involves linkage between places.

- Identify examples of linkages, e.g., television, roads, and the types of items generally moved.
- Locate places visited by students and their families and graph the frequency of travel.
- Display, on a world map, places where relatives were born or where families have contacts, e.g., friends, missionaries.
- Use maps to describe patterns of trade and to measure distances among places.
- Visit local places and collect data about transportation and communication links, e.g., radio or TV station, telegraph office, newspaper, post office, airport or railroad.
- Make class scrapbooks about transportation and communication in the community, state/province, country and world.
- Study different forms of communication and transportation showing how they developed, spread and changed.
- Write a story, draw pictures, or stage a play about communication and transportation in the future.
- Compare communication and transportation networks in various parts of the world.
- Review newspaper advertisements for airline destinations and map them.

Patterns of *movement* involve people, ideas and products.

- Analyze maps to locate patterns of movement involving people, ideas and products.
- Trace patterns of movement which resulted in the growth of a country.

Grade Four

- Use maps and aerial photos to note how transportation systems change patterns of movement.
- Describe several movements of population on a global scale as a changing pattern in world geography, e.g., the movement of people from drought areas of Africa, people from Latin America migrating to North America.
- Analyze the methods of transportation used to move products among places and indicate why those methods are used.
- Analyze how the movement of ideas, products, and people can have effects in other world areas, e.g., good nutrition, Peace Corps volunteers, rock and roll music, soft drinks. and jeans.

Theme

Regions: How They Form and Change

Key Ideas

Regions are a way to organize information.

A region has common characteristics.

Learning Opportunities

- Identify a school region and community for the class by locating homes of pupils on a community map and enclosing the locations within a boundary.
- Point out physical and human differences between places using maps and globes, e.g., population distribution, economic activity, religion, language, mountains.
- Examine five thematic maps of North American or world regions, e.g., climate, vegetation, physical features, agriculture, population, industry, and compare their boundaries.
- Locate examples of physical features that serve as boundaries between states/provinces and countries.
- Make observations to group areas by their common characteristics in order to delimit a business region or a factory region in the community.
- Describe ways in which neighborhoods and communities may be defined as regions.
- Locate areas that can be classified as regions, e.g., forests, deserts, agricultural areas, political units, and categorize them as physical or human regions.
- Examine a variety of thematic maps, e.g., population, climate, vegetation, to determine the criteria used to draw regional boundaries.
- Tell ways in which states/provinces are examples of regions.

Central Focus: The State/Province, Country and World

- Devise regions for North America or the world and give reasons for your choices. Compare your regions to those in atlases.
- Draw boundaries around regions that center on a major river system, a population center, a newspaper circulation area
- Establish criteria to group similar sections of the state/province, country or world and use the criteria to delimit regions.
- Identify animal and plant life indigenous to selected regions.
- List economic activities which are most likely to be located in specific regions.
- Demonstrate that by altering criteria the boundaries and shapes of regions can be changed.
- Change a school region for the class to one for several grades or the whole school, by plotting the places where students live in the community.
- Alter the boundaries of regions on maps and justify the changes.
- Examine thematic maps for similar topics in a variety of atlases and note how the boundaries differ.

Regions change.

Central Focus: North America (United States/Canada/Mexico)

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Define relative location as position in relation to other locations.
- Locate places relative to other places e.g., Los Angeles is west of Atlanta.
- Locate places relative to natural features, e.g., the state of Ohio is south of Lake Erie.
- State the locations of continents relative to each other, e.g., Africa is east of South America which is southeast of North America.

Location of places may be described using reference systems.

- Identify the major reference points on maps and globes, e.g., Equator, Tropics of Cancer and Capricorn, Arctic and Antarctic Circles, Prime Meridian, 180° meridian relative to North America and the world.
- Define the term hemisphere.
- Use maps and globes to classify locations in hemispheres.
- Formulate a number/letter grid system and a number/number grid system to locate places.
- Apply latitude and longitude to locate points in North America on maps and globes.
- State the latitude and longitude of places in North America marked on maps and globes.
- Demonstrate how parallels of latitude can be used to determine east-west direction and how meridians of longitude can be used to determine north-south direction.
- Use cardinal and intermediate directions on a map of the local community.

Reasons can be identified for the *location* of places.

- Determine specific reasons for the location of selected cities/places in North America, e.g., bodies of water, a unique landform, transportation junctions, natural resources, source of electrical power, historical accident, human factors.
- Trace the historical change of a populated area in North America in order to demonstrate the differing influences on the location.
- Prepare an inventory of significant local landmarks and analyze reasons for their locations.

Grade Five

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Define what is meant by "physical characteristics."
- Map the major land and water features of North America.
- List several significant characteristics of the Canadian Shield, the Rocky Mountains, the Gulf of Mexico, and other physical regions.
- Describe the physical characteristics of the neighborhood.
- Analyze maps to determine the relationship among climate, natural vegetation, and natural resources.
- Estimate the significance of the physical environment as an influence on settlement patterns.

Places have human characteristics.

- Define what is meant by "human characteristics."
- Describe significant human characteristics of specific places used for agriculture, mineral extraction, industry, fishing, forestry, recreation/tourism.
- Account for the distribution of population with respect to landforms, climate, natural vegetation, resources, historical event, or human need.
- Compare two capital cities with regard to similarities and differences.
- Identify ways in which a place has changed over time through the use of historic maps.

Places may be described in different ways.

- Design symbols as a reference for map interpretation. Place them in a legend and use them on a map.
- Represent several physical characteristics of the neighborhood through sketches, diagrams, and maps.
- Represent several human characteristics of the neighborhood through sketches, diagrams, and maps.
- Exchange drawings to compare/contrast perceptions of the same places, e.g., detail, exaggerations, patterns.
- Compare a visit to a vacation resort with a classmate who has visited the same resort.
- Collect tourist brochures to appraise the attractions of selected places in North America.
- Design your own brochures and/or bus tours of North America.

Central Focus: North America (United States/Canada/Mexico)

• Examine visual materials, e.g., films, filmstrips, photographs, slides of homes, buildings, cuisine, land use and ownership, language, and vocations in order to note the variety across the continent.

Theme

Relationships within Places: Humans and Environments

Key Ideas

people depend upon the environment.

Relationships within places include how

Relationships within places include how people adapt to and change the environment.

Learning Opportunities

- Define resources as those things that people value and use.
- Identify several resources from the environment.
- Locate, on a map, the major industrial areas of North America.
- Locate, on a map, the major resources found in North America.
- Examine a variety of maps to determine which resources are at, or close to, industrial areas in North America.
- Note changes, over time, in the utilization of some natural resources.
- Hypothesize about the relationships among natural resources, manufacturing, transportation, and markets.
- Examine maps, charts, and graphs to determine how a city has changed over time.
- Identify and explain the economic activities in areas such as Pittsburgh, Atlanta, and the Central Valley of California.
- Give examples of human alterations of the physical environment that have produced positive and negative consequences, e.g., buildings, open storage, transportation facilities, sewage disposal.
- Construct maps to denote an area involved in an environmental problem, e.g., flood control, loss of recreational lands, and fishing resources.
- List the apparent changes in landforms, climate, natural vegetation, and resources which are the result of humans in a place.
- Judge several human features as beneficial or harmful to the landscape.
- Evaluate newspaper articles, journals, media reporting, and first hand experiences to research an environmental
- Evaluate a national or international decision that has affected environmental quality.

Grade Five

Relationships within places include the impact of technology on the environment.

- Describe relationships between tourism and environmental change.
- Appraise ways that industrialization has contributed to the quality of life.
- Assess the effects of communication technology such as TV, VCR, satellites, and computers in North America.
- List advantages and disadvantages of high technology in changing or improving the environment.
- Hypothesize about the future effects of technology on nonearth environments, e.g., the moon, other planets, outer space.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

- Explain why human activities require movement.
- Give examples of human movement including daily, seasonal, and periodic movement. Compare reasons, distances, frequency, and mode of transportation.
- Locate places in North America visited by students or their relatives.
- Collect labels of products imported from other states/provinces or other North American countries.
- Map the locations from which products were exported.
- Use maps and globes with scales expressed in metric and customary units.
- Compute distances between countries and/or five major cities of North America, and your community.
- Describe patterns of trade to demonstrate the direction of natural resources and manufactured products.
- Gather information about a specific industry including location, importance in world trade, and routes bringing the product into the community.

Movement involves linkages between places.

- State ways that technological change has increased human mobility and movement.
- Identify several ways that the countries of North America are linked by transportation/communication.
- Hypothesize about the transportation/communication of the future.
- Design your own modes of transportation in the future.

Central Focus: North America (United States/Canada/Mexico)

- Compare transportation/communication of the present with those which parents or grandparents used.
- Evaluate the local subway system or bus/streetcar line as conditioners of travel patterns.
- Determine that few places are self-reliant, therefore, human networks bring areas together.

Patterns of *movement* involve people, ideas, and products between places.

- Explain the varied patterns in the movement of people (tourism), ideas (computer data, TV, telephones), and materials (wheat).
- Evaluate the consequences of differing national aspirations, currencies, trade barriers, cross-border environmental problems, and standards of living.
- Hypothesize about the future of the relationships among the countries of North America after examining existing relationships.

Theme

Regions: How They Form and Change

Key Ideas

Regions are a way to organize information.

Learning Opportunities

- Identify a school region by locating homes on a community map and enclosing the locations with a boundary.
- Distinguish ways that a neighborhood and a shopping mall are different/similar.
- Summarize characteristics that would delimit a business region from an industrial region in the community.
- Identify other types of regions within the community.
- Compare maps of North America that show landforms, climate, and natural vegetation regions to maps that show where people live.

A region has common characteristics.

- Define a region as an area that has one or more common characteristics.
- Define different types of regions for the same area based on different data or by increasing the amount of data.
- Examine a variety of thematic maps to determine the criteria used to draw regional boundaries.
- Categorize regions as physical or human.
- Differentiate between the major human and physical regions of North America.
- Apply knowledge of one region to that of another similar region on another continent.

Grade Five

Regions change.

- Demonstrate that by altering criteria, the boundaries and shapes of regions are changed, e.g., the "Sun Belt."
- Review the changing boundaries of two regions in North America, e.g., oil producing areas, corn producing areas.

Theme

Location: Position on the Earth's Surface

Key Ideas

Learning Opportunities

Location of places can be described using relative terms.

- Identify relative locations of physical and human features on the central focus continents, using maps and globes.
- Relate the location of places relative to physical features.
- Mark locations of selected places on a map.

Location of places can be described using reference systems.

- Relate the latitudinal locations of each central focus region to the Equator, the Tropic of Cancer, the Tropic of Capricorn, the Arctic Circle, and the Antarctic Circle; relate the longitudinal limits of each region to the Prime Meridian and the 180° meridian.
- Use a number/letter system, a number/number system and directions to locate places in each central focus region.
- Find the latitudinal and longitudinal extent of each central focus region, the greatest north/south and east/west distances, and the hemispheric locations of each central focus region.

Reasons can be identified for the *location* of places.

- Make inferences about the locations of major cities in each of the central focus regions.
- Compare the locations of selected cities in South America (highland locations), with selected cities in Eurasia and Africa to note the geographic factors, e.g., location near bodies of water, availability of natural resources, and energy, which influence the location of each city.
- Evaluate a list of reasons identified for the location of each city.

Theme

Place: Physical and Human Characteristics

Key Ideas

Learning Opportunities

Places have physical characteristics.

- Define and use geographic terms in describing the physical characteristics of places such as the rainforests of South America, the Himalaya mountains.
- Compare climate, landforms and water forms, natural vegetation, and ecosystems within and between the central focus regions.

Grade Six

Places have human characteristics.

- Use maps to determine relationships among climate, landforms and waterforms, natural vegetation, and ecosystems.
- Define geographic terms which describe human characteristics of places.
- Contrast political, economic, and social characteristics of each central focus region.
- Use maps to determine relationships of human characteristics among and within each region.

Places may be described or represented in different ways.

- Use symbols to represent physical and human characteristics on maps.
- Examine time zone relationships to longitude, sizes of countries, and differences within and between the central focus regions.
- Prepare a plan to move to the best place to live in the central focus regions. Defend your choice.

Theme

Relationships Within Places: Humans and Environments

Key Ideas

Relationships within places include how people depend upon the environment.

Relationships within places include how people adapt to and change the environment.

Relationships within places include the impact of technology upon the environment.

Learning Opportunities

- List ways in which people depend upon the environment.
- Describe the population distribution and density of places in the central focus regions and relate these to environmental factors.
- Use maps to determine the availability of resources to and within these regions.
- List ways in which people adapt to and change the environment.
- Sketch various methods of land use, e.g., irrigation in dry areas, terraces in hilly areas, flood control, housing.
- Evaluate land use in the central focus regions.
- Define terms which describe the impact of technology upon the environment, e.g., pollution.
- Investigate hypotheses about relationships among resources, manufacturing and service industries, transportation, and population densities in the central focus regions.
- Draw maps illustrating several of these relationships.
- Introduce a case study, using magazine and newspaper articles, to examine the impact of technology on a rainforest in Brazil or the Philippines.

Theme

Movement: Humans Interacting on the Earth

Key Ideas

Learning Opportunities

Movement demonstrates interdependence.

- Define geographic terms which describe movement of people, ideas, and products, e.g., transportation, communication.
- Interpret flow charts illustrating the direction and flow volume of trade among nations within and outside of the central focus regions.
- Recognize environmental problems facing the central focus regions as global problems, e.g., desertification, deforestation, acid precipitation, pollution, depletion of resources.

Movement involves linkages between places.

- Compare such transportation and communication linkages as air and sea routes, TV and radio, among the central focus regions.
- Note changes in linkages over time.
- Analyze maps to determine the major linkages among nations in the central focus regions.

Patterns of *movement* involve people, ideas, and products.

- Trace movements of raw materials and manufactured products in the central focus regions.
- Collect labels of products to determine and map their countries of origin.
- Evaluate migration patterns within and outside of the central focus regions.

Theme

Regions: How They Form and Change

Key Ideas

Learning Opportunities

Regions are a way to organize information.

- Devise criteria which identify areas of the central focus as regions.
- Define geographic terms which describe distinctive features of the central focus regions.
- Draw inferences from graphs and statistics about the central focus regions.

A region has common characteristics.

● Analyze maps of the central focus regions to determine human and physical characteristics, e.g., race, language, nationality, religion, landforms, climate.

Grade Six

- Categorize subregions and regions of the central focus areas as "developed" or "developing."
- Identify and evaluate criteria used to define regions classified as "developed' or "developing."
- Evaluate personal choices and national choices of solutions to regional problems.
- Make a chart of the ways in which regions change.
- Assess the impact of change on the daily life of people in the central focus regions.
- Illustrate changes in political status, standards of living, and population distribution, with appropriate timelines.

Regions change.

SELECTED TERMS

- absolute location the location of a point which can be expressed exactly by a grid reference, i.e., the intersection of a parallel of latitude and a meridian of longitude.
- acid precipitation precipitation with a pH value of 5.6 or lower (7 is neutral; less than 7 increasing in acidity and more than 7 increasing in alkalinity). The precipitation contains excessive amounts of acid formed when oxides of sulfur and of nitrogen released by combustion (especially by the burning of hydrocarbons, such as petroleum, coal and natural gas) are converted to acids in the atmosphere. Many animals and plants cannot tolerate the excessive acidity of such precipition.
- Antarctic Circle the 66.5°S latitude encircling the continent of Antarctica. Along this latitude, because of the inclination of the earth's axis, daylight lasts for 24 hours on the winter solstice of December 22, whereas on the summer solstice of June 21, continual night prevails.
- Arctic Circle the 66.5°N latitude. Along this latitude, because of the inclination of the Earth's axis, daylight lasts for 24 hours on the summer solstice of June 21, whereas on the winter solstice of December 22, there is continual night.
- cardinal directions the four main points of the compass: north, south, east, and west.
- central business district the heart of a city
 (downtown) in which there is the greatest
 concentration of financial and
 professional services and major retail
 outlets, where land use is the most dense
 and land values are at their highest and
 where the highest buildings are usually
 found.
- communication the means by which people make contact with, exchange information or ideas with, or trade with, others.
- community a place with many neighborhoods and places where people live, work, and play, or a place where people have common characteristics, interests and values.

- country the territory of a nation, delimited by a boundary which separates it from other nations.
- deforestation the permanent removal of forest and its undergrowth by natural or human forces.
- desertification the spread of desert-like conditions into semi-arid lands, brought about by the activities of people and their livestock and/or by climatic change.
- developed (country) an adjective applied particularly to the economy and social conditions of a country or region. It implies the necessary capital for cultural and social advancement; full use of natural and economic resources, skills, machinery, etc.
- developing (country) an adjective applied particularly to a country or region, formerly underdeveloped, now in the process of becoming developed.
- ecosystem (ecological system) a system formed by the interaction of all living organisms (plants, animals, humans) with each other and with the physical and chemical factors of the environment in which they live.
- environment everything in and on the Earth and its atmosphere within which organisms, communities or objects exist.
- Equator an imaginary line running east-west around the globe and dividing it into two equal parts known as the northern and southern hemispheres.
- flood control the regulation of excessive run off of water in order to prevent flooding of the land.
- flow chart a chart or diagram showing a series of interconnected events, actions or items which indicate the progressive development of a theme, product or other objective.
- hemisphere half a sphere. For example, the Earth can be divided into the northern and southern hemispheres by the Equator, and the eastern and western hemispheres by the Prime Meridian and 180° meridian.

- human characteristics the capabilities that people, their activities and organizations, past and present, use to change the landscape.
- industrialization the growth of large-scale machine production and the factory system. The process of introducing manufacturing in countries or regions where most of the people are engaged mainly in agricultural activities.
- intermediate direction points of the compass between the four cardinal points, e.g., northwest, northeast, southeast, southwest.
- irrigation the artificial supplying of water to land to help in the growth and productivity of cultivated plants.
- landform the shape, form or nature of a specific physical feature of the Earth's surface (e.g., hill, plateau, mountain).
- land use the full range of uses made by people of the surface of the land. Uses are classified as urban, rural, agricultural, forested, etc., with more specific subclassifications, such as high-income residential, nursery crops, of pine forest.
- latitude the position of a point on the Earth's surface expressed as its angular distance from the Equator in either north or south directions up to 90°.
- linear scale the indication on a map of the ratio between a given distance on the map to the corresponding distance on the Earth's surface, e.g., one inch represents 63,360 inches.
- linkage the contact and flow of ideas, information, people, and products between places.
- location the position of a point on the surface of the Earth expressed by means of a grid (absolute or mathematical) or in relation (relative) to the position of other places.
- longitude the position of a point on the Earth's surface expressed as its angular distance from the Prime Meridian in either east or west directions up to 180°.
- manufacturing industry the making of articles or materials by physical labor or mechanical power. The processing or changing of raw materials and foodstuffs into a useful form.

- migration the act or process of moving from one place to another with the intent of staying at the destination permanently or for a relatively long period of time.
- mobility (human) the ability of people to move readily from one place to another, or from one job to another.
- natural vegetation plants naturally found together in an area. Little of the world's vegetation is entirely unmodified by human activities.
- neighborhood a number of persons living near one another or in close proximity, which may allow for everyday social contact.
- North Pole the geographic point at which all meridians meet in the northern hemisphere.
- physical characteristic the landscape in its natural condition.
- physical feature a natural structural feature of the Earth's surface (e.g., hill, plateau, mountain, river, lake).
- places locations having distinctive characteristics that give them meaning and character and distinguish them from other places.
- pollution the direct or indirect process by which any part of the environment is affected in such a way that it is made potentially or actually unhealthy, unsafe, impure or hazardous to the welfare of the organisms which live in it.
- population density the number of individuals occupying a particular unit area, derived from dividing the number of people in a unit area by the area they occupy, i.e., 2,000 people ÷ 10 square miles = 200 people per square mile.
- population distribution the dispersal of people over the Earth's surface.
- Prime Meridian (Greenwich Meridian) the standard meridian of the Earth located at 0°, from which longitude is measured.

 The Prime Meridian crosses Greenwich in London, England.
- province a political subdivision of a country.
- rainforest a dense forest growing in moist tropical and warm temperate regions with heavy, evenly distributed rainfall.
- raw material a basic commodity (natural or partly processed) which may be

- raw material a basic commodity (natural or partly processed) which may be transformed by an industrial or manufacturing process into some further product before being used.
- region an area with one or more common characteristics or features which give it a measure of unity and make it different from the surrounding areas.
- relative location the location of a point relative to another point or points.
- revolution the movement of the Earth around the sun which creates seasonal changes. The Earth follows an elliptical path to complete one revolution in 365.25 days.
- resource a thing that people value and use. The means of meeting a need for, or a deficiency in, food, shelter, warmth, transportation, etc.
- rotation the turning of the Earth on its axis from west to east which creates day and night.

 The average length of time for one complete rotation is 24 hours.
- service industry an activity concerned with service to other industries and to the individual (e.g. financial, commercial, educational, professional institutions, trades, transport and communication, etc.).
- settlement pattern the distribution of any group of human habitations, including rural and urban elements.
- shifting cultivation one of a number of systems of cultivation where land is cropped and harvested and after a few years, with the

- initial fertility exhausted, is abandoned in favor of a new patch.
- South Pole the geographical point at which all meridians meet in the southern hemisphere.
- state a political subdivision of a country.

 Sometimes refers to a country, i.e., an independent state.
- taiga a largely evergreen forested area, located equatorward from tundra areas.
- technology the ways in which societies provide themselves with the material objects of the civilization.
- terrace one of a series of horizontal steps cut into a hillside to provide cultivable land and to reduce soil erosion in an area of steep slopes.
- thematic map a map representing a specific spatial distribution, theme, or topic, i.e., population density, cattle production, or climates of the world.
- longitude within which the mean time of the central meridian is selected to represent the whole division.
 - transportation the ways in which people and goods travel from one place to another.
 - Tropic of Cancer the 23.5°N parallel of latitude which marks the farthest north point of the overhead sun on June 21.
 - Tropic of Capricorn the 23.5°S parallel of latitude that marks the farthest south point of the overhead sun on December 21.