Map Essentials

How to Read a Map

Maps are like messages sent out in code. To help us translate the code, mapmakers provide certain features. These features help us understand the message they are presenting about a particular part of the world. Of these features, almost all maps have a title, a compass rose, a scale, and a legend. The map below has these four features, plus a fifth—a locator map.

1 Title

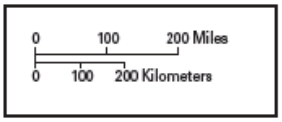
A map's **title** shows what the subject of the map is. The map title is usually the first thing you should look at when studying a map, because it tells you what the map is trying to show.

2 Compass Rose

A directional indicator shows which way north, south, east, and west lie on the map. Some mapmakers use a "north arrow," which points toward the North Pole. Remember, "north" is not always at the top of a map. The way a map is drawn and the location of directions on that map depend on the perspective of the mapmaker. Most maps in this textbook indicate direction by using a compass rose. A **compass rose** has arrows that point to all four principal directions.

3 Scale

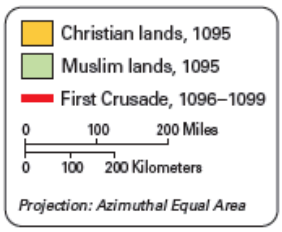
Mapmakers use scales to represent the distances between points on a map. Scales may appear on maps in several different forms. The maps in this textbook provide a **bar scale**. Scales give distances in miles and kilometers.



To find the distance between two points on the map, place a piece of paper so that the edge connects the two points. Mark the location of each point on the paper with a line or dot. Then, compare the distance between the two dots with the map's bar scale. The number on the top of the scale gives the distance in miles. The number on the bottom gives the distance in kilometers. Because the distances are given in large intervals, you may have to approximate the actual distance on the scale.

4 Legend

The **legend**, or key, explains what the symbols on the map represent. Point symbols are used to specify the location of things, such as cities, that do not take up much space on the map. Some legends show colors that represent certain features like empires or other regions. Other maps might have legends with symbols or colors that represent features such as roads. Legends can also show economic resources, land use, population density, and climate.



5 Locator Map

A **locator map** shows where in the world the area on the map is located. The area shown on the main map is shown in red on the locator map. The locator map also shows surrounding areas so the map reader can see how the information on the map relates to neighboring lands.

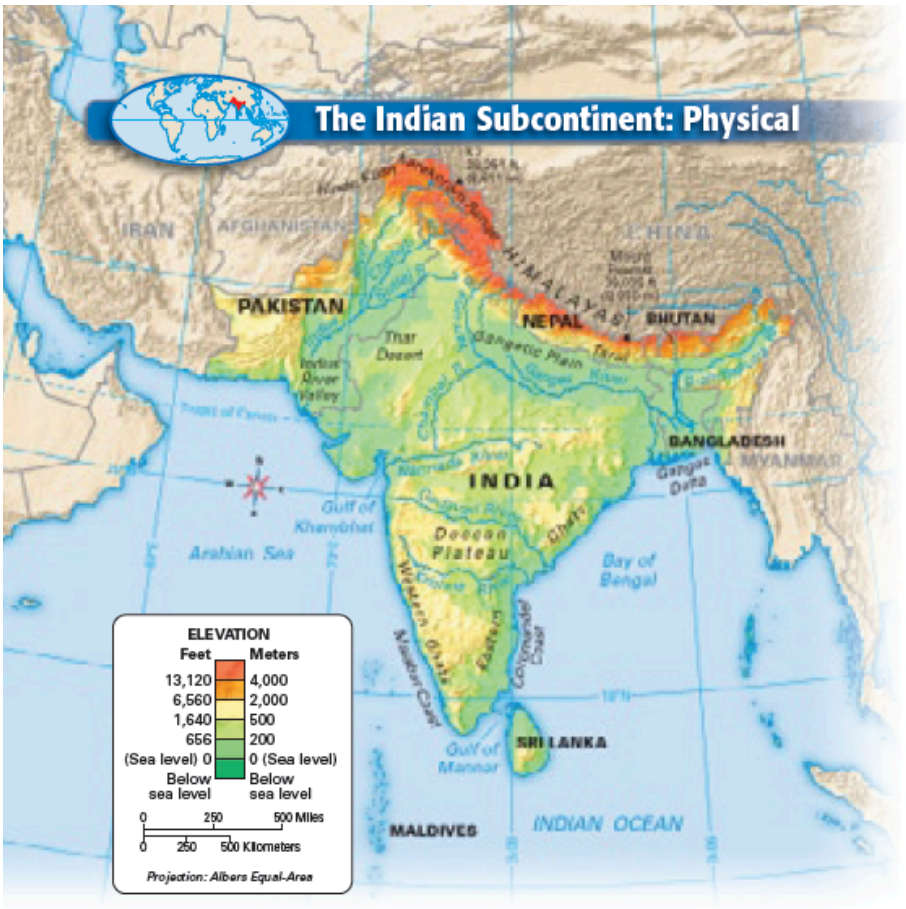
Working with Maps

Using Different Kinds of Maps

As you study the world's regions and countries, you will use a variety of maps. Political maps and physical maps are two of the most common types of maps you will study. In addition, you will use special-purpose maps. These maps might show climate, population, resources, ancient empires, or other topics.

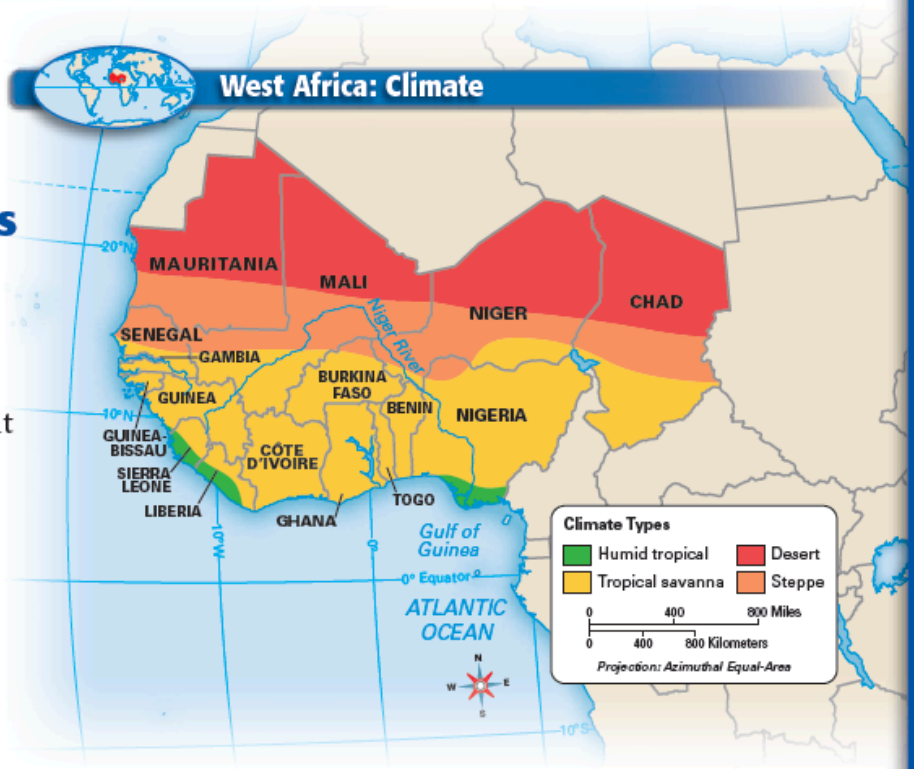
Political Maps

Political maps show the major political features of a region. These features include country borders, capital cities, and other places. Political maps use different colors to represent countries, and capital cities are often shown with a special star symbol.



Physical Maps

Physical maps show the major physical features of a region. These features may include mountain ranges, rivers, oceans, islands, deserts, and plains. Often, these maps use different colors to represent different elevations of land. As a result, the map reader can easily see which areas are high elevations, like mountains, and which areas are lower.

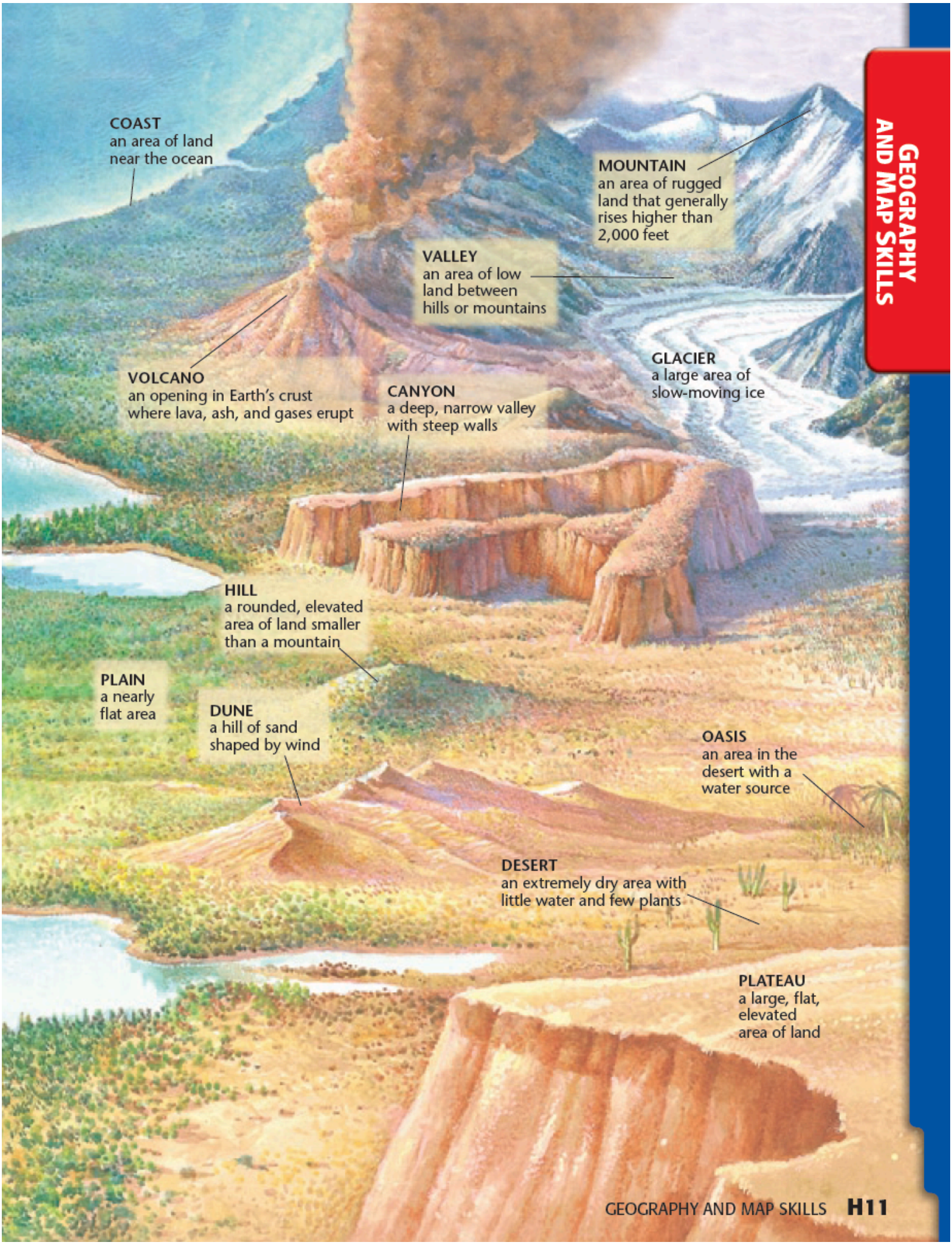


Special-Purpose Maps

Special-purpose maps focus on one special topic, such as climate, resources, or population. These maps present information on the topic that is particularly important in the region. Depending on the type of special-purpose map, the information may be shown with different colors, arrows, dots, or other symbols.

Using Maps in Geography The different kinds of maps in this textbook will help you study and understand geography. By working with these maps, you will see what the physical geography of places is like, where people live, and how the world has changed over time.

Geographic Dictionary


COAST
an area of land near the ocean
MOUNTAIN
an area of rugged land that generally rises higher than 2,000 feet
VALLEY
an area of low land between hills or mountains
VOLCANO
an opening in Earth's crust where lava, ash, and gases erupt
CANYON
a deep, narrow valley with steep walls
GLACIER
a large area of slow-moving ice
HILL
a rounded, elevated area of land smaller than a mountain
PLAIN
a nearly flat area
DUNE
a hill of sand shaped by wind
OASIS
an area in the desert with a water source
DESERT
an extremely dry area with little water and few plants
PLATEAU
a large, flat, elevated area of land

Themes and Essential Elements of Geography

by Dr. Christopher L. Salter

To study the world, geographers have identified 5 key themes, 6 essential elements, and 18 geography standards.

"How should we teach and learn about geography?" Professional geographers have worked hard over the years to answer this important question.

In 1984 a group of geographers identified the 5 Themes of Geography. These themes did a wonderful job of laying the groundwork for good classroom geography. Teachers used the 5 Themes in class, and geographers taught workshops on how to apply them in the world.

By the early 1990s, however, some geographers felt the 5 Themes were too broad. They created the 18 Geography Standards and the 6 Essential Elements. The 18 Geography Standards include more detailed information about what geography is, and the 6 Essential Elements are like a bridge between the 5 Themes and 18 Standards.

Look at the chart to the right. It shows how each of the 5 Themes connects to the Essential Elements and Standards. For example, the theme of Location is related to The World in Spatial Terms and the first three Standards. Study the chart carefully to see how the other themes, elements, and Standards are related.

The last Essential Element and the last two Standards cover The Uses of Geography. These key parts of geography were not covered by the 5 Themes. They will help you see how geography has influenced the past, present, and future.

5 Themes of Geography

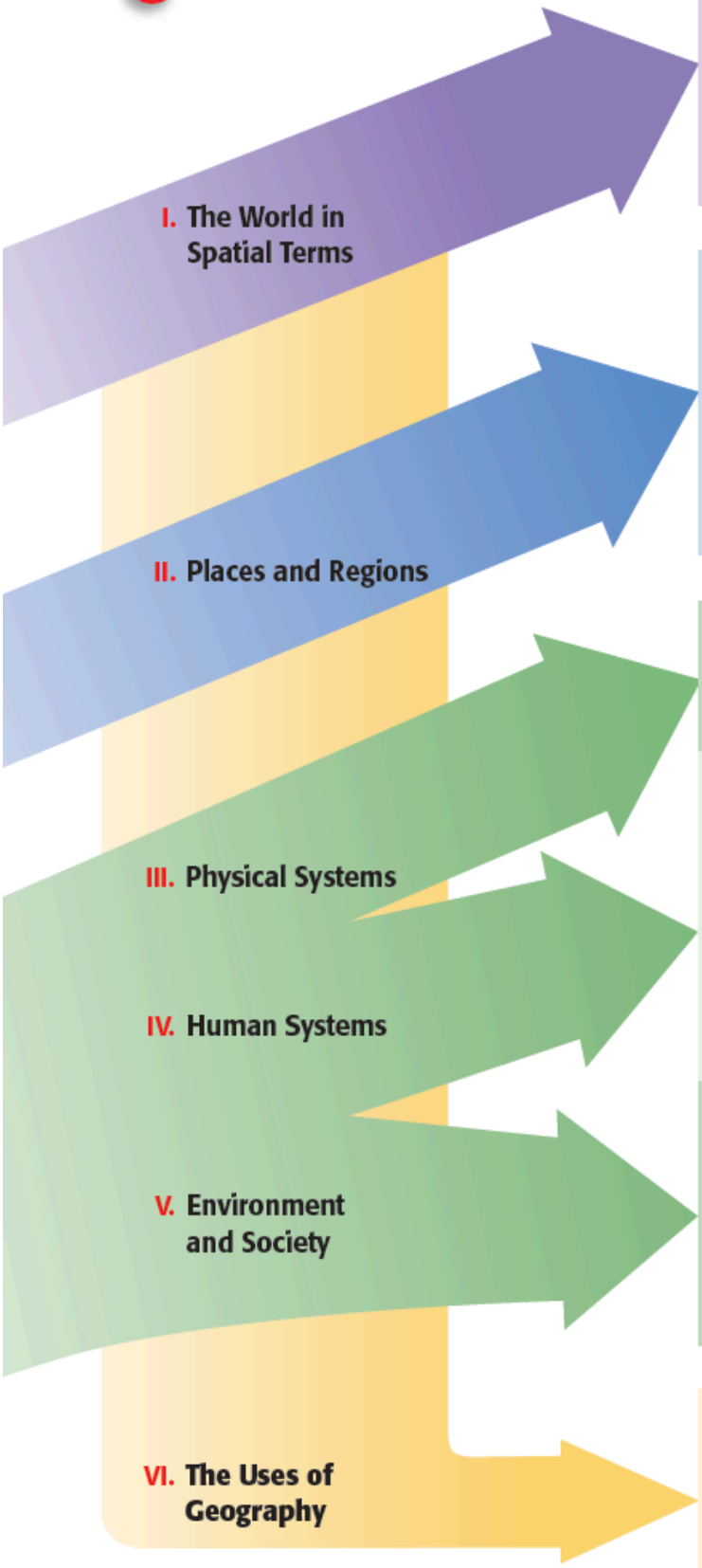
Location The theme of location describes where something is.

Place Place decribes the features that make a site unique.

Regions Regions are areas that share common characteristics.

Movement This theme looks at how and why people and things move.

Human-Environment Interaction People interact with their environment in many ways.



18 Geography Standards

1. How to use maps and other tools
2. How to use mental maps to organize information
3. How to analyze the spatial organization of people, places, and environments

4. The physical and human characteristics of places
5. How people create regions to interpret Earth
6. How culture and experience influence people's perceptions of places and regions

7. The physical processes that shape Earth's surface
8. The distribution of ecosystems on Earth

9. The characteristics, distribution, and migration of human populations
10. The complexity of Earth's cultural mosaics
11. The patterns and networks of economic interdependence on Earth
12. The patterns of human settlement
13. The forces of cooperation and conflict

14. How human actions modify the physical environment
15. How physical systems affect human systems
16. The distribution and meaning of resources

17. How to apply geography to interpret the past
18. How to apply geography to interpret the present and plan for the future