This is version 1.4.4 of this resource, released in August 2018.

Information on the latest version and updates are available on the project homepage: http://textbooks.wmisd.org/dashboard.html
Brian Dufort  
Shepherd Public Schools  
Odyssey MS/HS  
Brian is originally from Midland, MI and is a graduate of Northern Michigan University. He has spent his entire teaching career at Odyssey Middle/High School, an alternative education program in the Shepherd Public School system. In 2001, his environmental studies class was one of seven programs from the United States and Canada to be chosen as a winner of the Sea World/Busch Gardens Environmental Excellence Award. Brian is also the Northern Conference director of the Michigan Alternative Ath-

Sally Erickson  
Livonia Public Schools  
Cooper Upper Elementary  
Sally has taught grades 3-6, as well as special education. She has served as a district literacy leader for many years and participated in the Galileo Leadership Academy in 2001-03. She is proud to be a teacher.

Matt Hamilton  
East Jordan Public Schools  
East Jordan Middle School  
Matt grew up in Cadillac, MI. He holds a bachelor and masters degree from Michigan State University. He currently teaches middle school History and Geography. Matt started and advises a club at his school called the Shoe Club to inspire his students to Dream Big. His wife and two daughters enjoy traveling and spending time in the outdoors.
David Soderquist
Three Rivers Public Schools
Three Rivers Middle School
For the Past 11 years David has taught 6-8 grade Social Studies for Three Rivers Middle School. He serves as Department Head, School Improvement Member and Social Studies Rep for his area. Over the past few years he has completed his Masters Degree in Curriculum and Instruction and become a state recognized Instructional Coach.

Steve Zigray
Concord Community Schools
Concord Middle School
Steve Zigray is a 6th grade teacher. He holds a Bachelor's Degree from Central Michigan University and a Masters Degree in K-12 Administration from Eastern Michigan University. Honors Steve has been awarded are the 2001 Junior Achievement Educator of the Year and he was nominated for Jackson Magazine's, Educator of the year in 2014. He has also coached high school and middle school sports, worked on various school improvement committees, wrote the 6th grade Common Assessment tests for Jackson County ISD and is an active member in the community as well as the PTO. He lives in southeast Jackson County with his beautiful wife and three fantastic daughters.
Chapter 3

Latin America

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?

2. How do people’s actions impact the world?

3. How does the environment affect human behavior and actions?
Latin America

The area known as Latin America is made up of the region south of the United States, beginning at the river that separates the U.S. from Mexico, the Rio Grande’, and extending to the southern tip of South America, an area known as Cape Horn.

This region includes Mexico, Central America, South America and the islands of the Caribbean Sea.

Latin America is home to 23% of the world’s forests and 31% of its freshwater. Despite a wealth of resources, the region’s population growth and the way in which people have used the land around them, have led to the destruction of many of these resources.

As the population continues to grow, a major challenge becomes finding safe water and ways to maintain sanitation in towns and cities. Pollution, both in the air and water (freshwater, oceans, and seas) is also a major problem confronting the people of Latin America. In some areas, competition over scarce resources has
led to social and environmental conflicts. These then pose a risk to the lifestyles of all who live there.

The Theme of “Human-Environment Interaction”

If you look back to the second and third questions that guide this chapter: “How do people’s actions impact the world?” and “How does the environment affect human behavior and actions?” you’ll begin to discover what the geographic theme of “Human-Environment Interaction” means.

The theme of Human-Environment interaction is an interesting one to explore because its roots are not just planted in geography. It runs through all of the social studies disciplines. It is a part of history, economics, and civics as well as geography and the sciences. Here’s an example from early history:

Humans have learned over time how to adapt to the environment around them and how to modify it to suit their needs. Most early permanent settlements sprang up around sources of water. In some of these places humans began to modify the environment around them so that they could settle in large regions around water. An early form of humans interacting with the environment was irrigation which allowed water from these major water sources to be brought in to surrounding farms to provide food for people.

Latin America is a great place to study this theme. Humans interact both positively and negatively with the environment around them. For example, when humans dam a river, there are consequences, both good and bad.

You will study some of these consequences throughout this chapter.
Mexico & Central America

Mexico and the nations of Central America make up the southern portion of the North American continent.

The Geography of Mexico

Mexico is bordered by the United States to its north, with the Rio Grande dividing much of the two countries. The Gulf of California and the Pacific Ocean lie to the west of Mexico.

Guatemala and Belize are found to the south, and the Gulf of Mexico and the Caribbean lay to its east.

Mexico is a land with a wide range of geographical features ranging from swampy areas and tropical forests to arid deserts and high mountain ranges.

Central Mexico is mainly a plateau which has mountain ranges on both sides. The northern area of the plateau is very arid and makes up nearly 40% of the total area of country. The two main mountain ranges found in Mexico are the Sierra Madre Oriental and the Sierra Madre Occidental. Volcanoes and smaller mountain ranges...
can also be found in southern areas of Mexico. The appearance of the many mountains and volcanoes, as well as earthquakes, is due to Mexico’s placement along the western edge of the North American tectonic plate. Actually, Mexico is located at a place on the earth where three different tectonic plates come together. The movement of these plates causes a great deal of geographic activity in Mexico.

What characteristic of Mexico’s geography do you think is the biggest challenge for the people living there? Use evidence to support your claim.

Image source: http://upload.wikimedia.org/wikipedia/commons/a/ad/World_tectonic_plate_map_large.png
QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?

2. How do people’s actions impact the world?

3. How does the environment affect human behavior and actions?

Central America

Central America is often referred to as its own region, but it is actually the southern portion of the North American continent. There are seven countries in this region which you can see on the embedded Google Map: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

Even though Central America is a relatively small area, its physical geography is very diverse. In some places it is very high, like the volcanic mountains and highlands. There are also lowlands covered in rainforest and dry savanna areas.

Central America contains rugged mountains and diverse amounts of vegetation. It is located near two oceans - both the Atlantic and the Pacific.
The major landform in Central America is the Sierra Madre mountain range. These rugged mountains extend through the center of Central America, running from Mexico in the west through the center of the region. Some of these mountains rise as high as 14,000 feet, with the highest being found in Guatemala. On each side of these highlands are coastal lowlands that run along the Atlantic and Pacific coasts. The lowlands are generally hot and humid, while the highlands are cool and relatively dry. There is also an active belt of volcanic mountains which runs along the Pacific coast from Mexico all the way down to Costa Rica.

With natural hazards such as volcanic activity, earthquakes, and hurricanes, Central America is the site of many natural disasters.

The volcanic activity results in eruptions and earthquakes. The close location to the oceans make the area vulnerable to hurricanes. In the past, Hurricanes and the floods that often follow can have a devastating effect on the lowland areas. In December of 1998, Hurricane Mitch struck Central America leaving thousands dead and even more homeless.

How do natural disasters often result in people in our global society becoming interconnected?
QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?

2. How do people’s actions impact the world?

3. How does the environment affect human behavior and actions?

South America

South America is the fourth-largest continent in the world. It can be divided into three physical regions: mountains/highlands, river basins, and coastal plains. Because of the variety of geographic features on this continent, there are a large number of biomes, regions of the world with similar climate, animals and plants, found here.

The deserts of the coastal plains rise up to meet the mountains of the Andes. The river basin of the Amazon has a dense, tropical rain forest, while the basin of another major river, the Prana, is made up of Grassland.

With this great variety, there is a large number of plant and animal species, making South America stand out.

Interactive 3.7 Google Maps - South America

Use this interactive widget to zoom in on and see the physical characteristics of South America.
among the other continents of the world.

Mountains & Highlands

The major mountain system in South America is the Andes Mountains, with a length of about 5,500 miles, which makes it the world’s longest mountain range. The Andes sit on the western side of the continent and stretch from its southern tip to its northern coast. The highest mountain peak in the Andes is Aconcagua, which is 22,841 feet tall, making Aconcagua the tallest mountain outside Asia.

Highlands are also a major feature of South America. The Altiplano (“high plain”) of Peru and Bolivia stands out at an elevation of about 12,300 feet. Marked by cold, windy weather, few trees survive here. The dominant vegetation is simply grass and shrubs. The northern area receives enough rainfall to grow crops, whereas the southern half receives relatively little rainfall.
The southern portion of South America is known as Patagonia. This region of Argentina and Chile consists of lower-elevation plateaus and rugged glaciers. The Argentine side features arid steppes, grasslands and deserts, while the western side found in Chile has glaciers in the mountains and even rainforests.

South America has three major river basins: the Amazon, Orinoco, and the Paraná. The Amazon River basin covers nearly 3 million square miles, making it the largest watershed in the world. It is also the world’s second longest river, stretching nearly 4,000 miles.

It begins in the norther part of South America and includes smaller river tributaries that come from the glaciers of the Andes. The Amazon River is the heart of the Amazon rain forest, which is the world’s largest tropical rainforest and makes up about half of
the total rainforests found in the world. It covers about 40% of South America and is spread over nine different countries.

The Amazon Rainforest is invaluable to the health of the planet as it provides about 20% of the world’s oxygen and absorbs an equal amount of carbon dioxide. Nowhere else on Earth is there the same kind of diversity of animal life like there is in the Amazon Rainforest. There are more than 2 million species of insects, a large variety of animals that include many different primates, and thousands of native birds such as macaws, parrots and toucans.

Investigation: Head to Google to investigate some of the plants that make their home in the Amazon and find ways people have used these plants.

Interactive 3.8 The World Wildlife Fund - Amazon Rainforest

Learn even more about the Amazon, including some of the threats at this website from WWF.
The Paraná River basin is not as large as the Amazon, but is over 1 million square miles. It covers much of southeastern Brazil as well as Bolivia, Paraguay, and northern Argentina. The Paraná River basin supplies water to the large plains found in the southern portion of South America, known as the Pampas. The Pampas have rich, fertile soil and predictable rainfall patterns. This makes the area important for ranching and farming.

The Orinoco River originates in the highlands of northern Brazil and empties into the Atlantic Ocean in Venezuela. The basin covers an area of about 366,000 square miles. There is a vast grassland region (savanna) known as the Llanos that is found in this area. The Llanos is a great habitat for many bird species, as well as many different aquatic river species like the piranha, electric eel, and the crocodile.

**Coastal Plains**

The coastal plains of South America are found on the northeastern coast of Brazil on the Atlantic Ocean, and the Pacific Ocean coast of Peru and Chile in the west. The coastal plains are very dry, with the Brazilian Highlands blocking the sea winds from the Atlantic, and the Andes Mountains blocking out the moisture coming in from the Pacific. The Atacama Desert is part of the coastal plain in the west. It is considered the driest desert region in the world, receiving less than a half inch of rainfall a year. While the Atacama has few plants and animals found in the region, it is a main source of copper which is important to the economy of Chile.

Do you think people live in the Atacama Desert? Why or why not?

Image source: http://upload.wikimedia.org/wikipedia/commons/0/08/Birds_eye_view_of_the_Chajnantor_plateau_in_Chile%27s_A tacama_Desert.jpg
QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. How do people’s actions impact the world?
3. How does the environment affect human behavior and actions?

The Caribbean

The Caribbean Sea is home to over 7,000 islands, thirteen of which are independent nations. This area is very diverse in terms of its physical geography. Many of these islands are primarily the result of volcanic activity. There are however few active volcanoes today. One well known volcano that has been active recently is Mt. Soufriere of Montserrat. After 365 years of lying dormant, it erupted in 1995 and has been the site of on-going volcanic activity ever since. Various other islands of the Caribbean are known to experience various forms of volcanic activity, even the island of Trinidad has small volcanoes. Most of the non-volcanic island found in this area are coral islands that formed from the coral reefs found throughout the Caribbean.
Hills & Mountains

With most of the main islands of the Caribbean being volcanic islands, many are very hilly and mountainous. The largest mountain ranges in the Caribbean include the Northern Range of Trinidad and the Blue Mountains of Jamaica. Many of these ranges in the Caribbean are covered by rainforests and provide an extensive variety of vegetation and wildlife. Because of the mountainous and hilly nature found in the lands of the Caribbean, many islands have little to no flat land leading up to these mountainous areas. This results in the formation of swamps where runoff rainwater is collected. Trinidad is home to two major swamps, the Nariva and the Caroni.

Rainforests & Desert

Rainforests are commonly found in South America, but they are also found on some of the islands of the Caribbean such as Jamaica and Puerto Rico. Rainforests add to the diversity of the flora and fauna of these islands. In contrast to these lush areas, a number of islands are also found to be very arid, almost desert like. Some of these islands include Aruba, Bonaire, Curacao and Grand Turk. Even though these islands are surrounded by water they receive relatively little, or sporadic, rainfall. Islands such as these have areas that are very rugged and dry. The plant life on these islands often include scrub vegetation, and even cactus.

Due to the dry climate, cactus can be found in many areas on Aruba.
So far a great deal of attention has been paid to the Physical Geography of the region. As you go through the next few sections of this text dealing with history, think about how humans interacted with their environment.

**Early Civilizations**

The cultivation of crops in the Americas first began near present-day Mexico City around 5000 B.C.E. Originally these crops were an addition to the hunting and gathering that was done by these early people. By 3000 B.C.E. these people began to rely more heavily on agriculture. This development spread to the other hunter-gatherers societies found in south America.
Many important early civilizations developed in this area, including the Olmecs, Zapotecs, Teotihuacanos, Mayas and Aztecs. These cultures developed complex societies, achieved high levels of technological advancement, developed complex architecture, and shared many cultural aspects.

With the establishment of agriculture, groups of early Americans began to develop more advanced societies. The earliest civilization in the Americas first developed along the coast of the Gulf of Mexico around 1200 B.C.E. This was the Olmec civilization which flourished around the time of the ancient Greek civilization and the Trojan War. They were a civilization that flourished around the time of the ancient Greek civilizations and the Trojan War. The rise of the Olmecs marked the beginnings of civilization in Central America. Centuries later the oldest civilization in South America developed in what would become Peru.

These ancient civilizations would rise and fall, eventually being replaced by the three great civilizations of Latin America: the Maya, the Aztecs and the Inca.

The Maya

The Mayan civilization was at its height from approximately 250 C.E. until 700 C.E. The Mayan civilization developed a written language, understood advanced mathematics and had an extensive knowledge of astronomy. They even developed a calendar based on their astronomical observations. The Mayans were also very skilled architects, building large stone pyramids and well developed large cities.

Follow this link to view a slideshow of the pyramids of Mesoamerica:
Starting around the year 700 C.E., the Mayan empire began to experience a decline. Archeologists are not sure why this happened, although some theories as to why include epidemics, earthquakes, drought, and warfare. Many researchers believe that it was most likely a combination of these events. Although the civilization collapsed, the Mayan people still can be found living in southern Mexico and into Central America.

Interactive 3.12 The Fall of the Mayans

Follow this link to read a National Geographic article about different possible reasons for the fall of the Mayan civilization. Which one do you think is correct? Record which theory you believe, and why, in your Interactive Journal.
The Aztecs

The Aztecs appeared in Mesoamerica sometime in the early 13th century. Before then, a group of people known as the Toltecs dominated the area. The Aztecs arrived as the Toltecs’ influence was on the decline. Perhaps the Aztecs were somewhat to blame for this decline. They built their capital city near Lake Texcoco in what today is central Mexico. The Aztecs drained the swampy land surrounding the lake and built artificial islands in the lake on which they established the beginnings of their capital city. This city, established in 1325 C.E., is known as Tenochtitlán. The city had around 200,000 inhabitants at one point, making it the third largest city in the world at that time.

The Aztecs developed a complex system of agriculture, which included irrigation practices, to support their civilization. Crops grown by the Aztecs included corn, beans, squash, and potatoes. They also built a powerful military. These two developments allowed them to conquer other native peoples around them, spread their influence, and build a strong empire.

The Inca

The Inca Empire began small, as a group that lived in a village in the Andes Mountains. When there was an attempt by another tribe to conquer them around the year 1200 C.E., the Inca were able to fight off their attackers and emerge victorious. From that time on, it would be the Inca that looked to expand their territory and grow an empire. Over the next 100 years, the Inca conquered many different tribes throughout South America. The Inca Empire would grow to stretch nearly the entire length of the western side of South America, becoming one of the largest empires in the world.

The Inca had a well-developed civilization. They built a strong central government, and had an equally strong army. They built roads, bridges and aqueducts to carry water to their cities. The Incas also kept official records with a
device called the quipu, which means knot. This was a cord which had a series of smaller colored strings attached to it on which knots were tied. As no South American culture had any system of writing at this time, this record keeping system was a major development for the Inca and allowed them to save and send information in a much easier and reliable manner than simple word of mouth.

The Inca also developed **terrace farming** in order to adapt to the sharp mountain slopes and make farming possible in the mountains. The Inca were so organized that they had stockpiles of food that could be distributed to the people when times of drought occurred and crops failed. Many of the foods we eat today were developed and grown by the Inca, such as; potatoes, beans and peanuts. The potato was especially important as it could easily grow in the poor mountain soil and survive the cold temperatures.

With their well-developed society, strong military, agricultural practices and engineering accomplishments, the Inca continued to grow in power and influence. The Inca maintained their dominance in South America until the Spanish conquistadors arrived and defeated them in 1533.

Return to your interactive journal. Describe ways ancient civilizations adapted to and changed their environment?
Latin America is home to about 525 million people who live in 33 different countries. The region’s population includes Native Americans, Europeans, Africans, Asians, and mixtures of these groups. It is a unique blending of cultures that has been influenced by both the native population and by the establishment of colonies by the European nations of Spain and Portugal. Marriages between European colonists and native populations established what is called the Mestizo class. Mestizos are people with a mix of both indigenous and European ancestry. Today, mestizos make up a large portion of the population of South America.

Another factor influencing the cultural landscape of South America was the importation of enslaved Africans. Most of these Africans were brought to Brazil, and it is their cultural practices, mixed with native and European beliefs that created a unique cultural landscape that can be seen in cultural traits such as music, dance and foods. Religion remains the backbone of many South American cultures. While Catholicism, the official religion of both Spain and Portugal at the time of colonization, dominates the continent, there are other spiritual beliefs that have had an influence on other social activities.

The Day of the Dead Festival, or Dia de los Muertos, is a Mexican festival celebrating the reunion of dead relatives with their families. This festival occurs each year on November 1st (All Saints Day) and 2nd (All Souls Day). The origins of the festival come from the ancient native peoples who believed that the souls of
the dead return each year to visit with their living relatives, and to eat, drink and be merry. With the arrival of the Spanish, certain Christian beliefs were brought into the festival. Today’s practice calls for all of the deceased children to be remembered on November 1st, All Saints Day with toys and colorful balloons adorning their graves. The next day, All Souls Day, adults who have died are honored with displays of their favorite food and drinks, as well as ornaments and personal belongings. Flowers and candles are placed on the graves and are supposed to guide the spirits home to their loved ones. Other parts of the celebration today include; the pan de muerto (a coffee cake decorated with candy bones), skull-shaped candies, paper mache’ skeletons and skulls. Today, these symbols and other items fill shops and candy counters in October. During this time, homes are often decorated in the same manner as the graves.

The Carnival of Rio de Janeiro in Brazil is a festival that is held every year before Easter. It is an example of a religious celebration that has also become a popular social event. The Rio Carnival is the largest carnival event in the world, attracting millions of tourists.

Another distinct cultural example is the gaucho (or “cowboy”). This cultural group was developed in the Pampas of South America. In the 1700s, gauchos hunted the herds of wild horses and cattle that had been roaming freely on the open grasslands. Much like the famous cowboys of America, the gaucho was seen as free-spirit and became the focus of many songs, stories, and films. The gaucho culture still exists today, especially in Argentina and Uruguay.
Political Geography

During the 1900s, the nations of Latin America experienced major political and social changes. Slowly, control by European nations began to decline, but they were replaced by the United States as that nation began to influence the area more. An example of this is the creation of Panama as an independent nation. Panama won its independence with the support of the United States, and once it became an independent country in 1903, Panama quickly signed a treaty with the U.S. giving it the rights to control what would become the Panama Canal Zone.

As the growth of industries, railroads and the expansion of trade began to bring new wealth to the upper classes, a new middle class began to form in the newly developing cities. But a vast majority of Latin Americans, especially those living in the rural areas, saw little to no progress being made in the condition of their lives. The gap between the rich and the poor grew and led to unrest among farmers and workers. By this time, many of the nations of Latin America were controlled by military dictators, and it was these governments that resisted demands for reform. In many cases, the military was used to put down these uprisings. This trend continued well into the next century.

In 1959, a revolution in Cuba was led by Fidel Castro. The Cuban president Fulgencio Batista was a military dictator who had the support of the United States because of his friendly policies towards the U.S. He was however unpopular in Cuba due to his cruel tactics in dealing with the Cuban people. After Castro’s victory and take-over of the island nation, he set up a communist government. The United States feared that communism would continue to spread throughout the region. Hoping to destroy the communist presence, the U.S supported other various military dictatorships throughout the region that opposed the communist governments. Over the next few decades, Latin America would continue to be the site of conflict between these competing factions.
These dictatorships were often brutal, and thousands of political prisoners were arrested. Although communism remained in Cuba, by the 1990s many of the military dictatorships that had been in power were replaced with people elected through a democratic voting process. The transition hasn’t been an easy one as the nations of Latin America struggle to replace governments that had been run by one man with ones elected by the people and rely on the democratic voting process to make decisions. Today Latin American countries are working to end corruption within their governments and bring economic stability.

Below are political maps of the regions of Latin America.
Section 8

Human-Environment Interaction

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. How do people’s actions impact the world?
3. How does the environment affect human behavior and actions?

When Hernando Cortes came upon Tenochtitlan, the capital city of the Aztecs, it was a large city sitting in the middle of a great lake in central Mexico. The Aztecs had built causeways connecting the city to the shore. They had small islands which were used for farming, also connected to the causeway system. After the Spaniards conquered the Aztecs, the city was taken over. The Spaniards decided that they wanted to drain the lake and use the land surrounding the city for farming. As the city was rebuilt by the Spanish, the forests surrounding what became Mexico City began to shrink. This began a long process that would drastically affect Mexico as we know it today.
The depletion of the forests in the area in the early 19th century led the springs that had supplied the city with fresh water to dry up. New fresh water wells were dug in 1857. By the twentieth century these wells numbered in the hundreds. The amount of water that was removed from the ground could not be replaced naturally, and the underground aquifer that fed the wells began to dry up.

As more water was removed from the ground, the land that the city was built on began to sink. Parts of the city sank below what remained of Lake Texcoco. This caused a serious threat to the city as it posed a flood risk during the rainy season. The course of action to prevent this was to sink wells into Lake Texcoco itself and remove enough water from the aquifer that fed it to make the level of the lake itself drop below the level of the city once again. Lake Texcoco has been drained in one way or another since the 1600’s. It now occupies only a small area surrounded by salt marshes just east of Mexico City. With the depletion of the ground-water, the land that the city is built on has become relatively unstable. Large fissures, or cracks, will open up from time to time. This, along with the fact that much of Mexico City today is built on top of the original Lake Texcoco lake bed, means that the cities buildings are at a constant risk. As the area is prone to earthquakes, the ground is not very solid and stable. The instability magnifies the ground shaking effect of the earthquakes causing greater damage than may have otherwise occurred.

Thinking Points - Record your responses in your Interactive Journal:
- Why do you think the Spanish settlers destroyed old Tenochtitlan and then built a new city where the old city had been?
- What two things were done to the environment in this area that has led to major problems today for Mexico City?
- What are these major problems?
Central America - Building the Panama Canal

Prior to 1914, a trip from New York to San Francisco required one to sail around the tip of South America. This was a journey of approximately 12,000 miles. Not only was this a long trip, but it was a treacherous trip as well. The voyage around Cape Horn, the southern tip of South America, is marked by hazardous conditions, including strong winds, strong currents and large waves. With this in mind, nations such as the United States, Great Britain and France decided that an alternate route was needed. If a canal passing through Central America was constructed, it would cut the travel distance between New York and San Francisco by nearly 8,000 miles, and allow ships to avoid the dangerous conditions around Cape Horn.

The next question became where to construct this new canal. France began work on a canal in Panama in the 1870s. The French effort was plagued by disease and financial problems and the project was eventually abandoned. The United States then considered its options. It could buy the rights to finish the French canal, or it could build one through Nicaragua. A canal there would be closer to the U.S., the terrain was flatter and easier to work with, and the large number of lakes could be connected, meaning less digging. But volcanic activity in Nicaragua prompted the United States to try to buy the territory in Panama, which at that time was a territory of Colombia. The U.S. failed to acquire the rights to build the canal. Just about this same time, an independence movement began. With support from the U.S., Panama successfully gained its independence. The United States was the first nation in the world to recognize the new government.
of Panama. Within weeks, a treaty between the U.S. and Panama gave a 10-mile strip of land to the United States.

Construction on the canal proved difficult. Beginning in 1907, Americans began blasting through the mountains that stood in the way. Yellow fever and malaria also posed a constant threat to the workers and threatened to slow the progress being made. Walter Reed, an Army medical doctor serving in Cuba during the Spanish American War, had discovered that these diseases were spread by mosquitoes that had bitten an infected person. When that mosquito bit another person, that person was then infected as well. Using the work of Walter Reed, anti-mosquito measures that had combated yellow fever in Cuba were put into place in Panama. Chemicals were sprayed on pools of shallow stagnant water where the mosquitoes bred and laid eggs. This treatment proved to be effective and greatly decreased the mosquito population, and thereby reduced the number of cases of yellow fever and malaria. With the disease factor no longer a major problem, the Panama Canal was finished and opened in 1914, making travel from the Atlantic Ocean to the Pacific much easier.

Thinking Points - Record your responses in your Interactive Journal:
• Describe why there was a desire to build a canal through Central America.
• What difficulties were faced by those attempting to build such a canal.
• How were these difficulties overcome?
South America - Amazon Rainforest Deforestation (Global Rainforest Deforestation)

The destruction of the Amazon rainforests is a serious concern. According to the World Wildlife Fund, more than 20% of the rainforest has already been destroyed. This number grows daily as the land continues to be cleared for agriculture, livestock ranches, mining operations and logging. In addition, some forest areas are being purposefully burnt in order to make charcoal to use as a source of fuel for local power plants. The effects of the destruction of the rainforest will have a lasting effect on people worldwide, as well as the planet itself. It has been estimated that if the deforestation continues at its current rate, the entire Amazon Rainforest will be depleted by the end of the 21st century.

What is at stake?

The Amazon Rainforest is known as “The Lungs of the Earth.” The amount of oxygen produced by the vegetation of the rainforest, as well as the amount of carbon dioxide that is absorbed by it, cannot be replaced. The destruction of the rainforest is believed by many to be a contributing factor to the global warming trend. As the forests are reduced the Earth’s ability to absorb adequate amounts of carbon dioxide are also reduced. The increased levels of carbon dioxide contribute to what is called “The Greenhouse Effect.” The Greenhouse Effect occurs when elevated levels of carbon dioxide help to trap the sun’s energy in the Earth’s atmosphere. Just as a glass greenhouse traps the heat from the sun, the Earth’s atmosphere, when too much carbon dioxide is present, will trap the heat from the sun as well. As we continue to burn more and more fossil fuels, more and more carbon dioxide is put into the atmosphere. Without healthy rainforests worldwide, the Earth cannot re-absorb enough carbon dioxide to lessen the impact and reduce the greenhouse effect.

Another issue caused by the destruction of the rainforests involve what is found in those forests. Many fruits, spices and other useful plants come from the rainforest, including; bananas, guavas, figs, mangos, black pepper, cayenne pepper, chocolate, cinnamon, cloves, ginger, coffee, vanilla and cashew nuts. It is not just the foods that we eat that are being destroyed. About 25% of our current prescription drugs that come from plants actually come from plants found in the rainforest. These include drugs include those that are used to fight cancer, AIDS, and various other viruses and infections.
Interactive 3.20
Deforestation Web-quest

Conduct an investigation into deforestation on this online web-quest.

Thinking Points - Record your responses in your Interactive Journal:

• What benefits do people get from the Amazon Rainforest?
  • How have people changed the rainforest?
• What are the negative effects of the changes that people have made to the rainforest?

Interactive 3.21
Enter Amazonia

For each section, record one thing you learned in your Interactive Journal:

• "Enter Amazonia" for general information.
• "Water worlds" for information about the waters and water animals
• "Life on Land" for land animals
  • "The Big Top" for animals in trees
• "Powerful Plants" to find out what plants are there and how the plants are used
• "Sacred Ground" to learn about problems in the rainforest.
Summary
People have been impacting the environment in which they live throughout history. Human impact on the environment can be explained in two ways. One is how people have adapted to and changed their environment to survive and make life more comfortable, the other is the effect that these changes and adaptations have on the environment. Many of these changes and adaptations have had a positive impact on the lives of humans, but often these changes have proven to be bad for the environment. You have read about a few of these examples as seen in Latin America. Consider what you have read and viewed in this chapter, and answer the Final Journal Discussion Questions below.

Final Journal Discussion Questions
After reading this section on Latin America, think about how the people of the earth, as members of a global society, are connected.

Show what you have learned by answering the following questions:

1. How has the decision to harvest trees from the rainforest (“cutting down the rainforest”) impacted the environment in South America? How has it impacted the world as a whole?

2. How has the environment of Latin America affected the behavior and actions of the people that have lived there. Site some specific actions.