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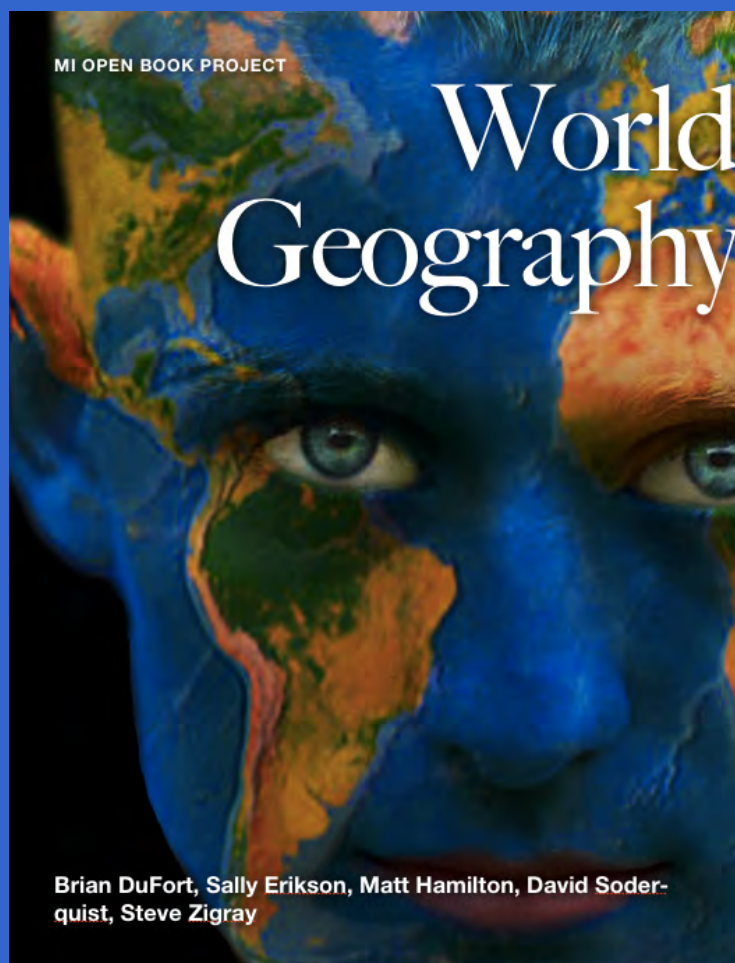
World Geography

Brian Dufort, Sally Erickson, Matt Hamilton,
David Soderquist, Steve Zigray

World Geography



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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>



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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-

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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.

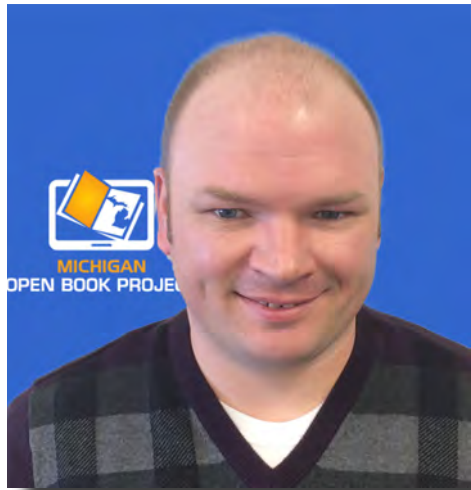


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East Jordan Middle School

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.



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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.

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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.



**MICHIGAN
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Studying Geography

QUESTIONS TO GUIDE INQUIRY

1. What is geography?
2. Why do we study geography?
3. What tools do geographers use?
4. What is geographic inquiry?
5. Why do we need to think globally?

What is Geography Anyway?

QUESTIONS TO GUIDE INQUIRY

1. What is geography?
2. Why do we study geography?
3. What tools do geographers use?
4. What is geographic inquiry?
5. Why do we need to think globally?

Using this Book - Tip #1

You can mark up the pages of this book with your own notes and ideas. You can also use the built in tools on your device to look up unfamiliar words. Vocabulary terms are bolded in this book, and by tapping them, or right clicking, you can look up the meaning of these words.

Some devices will also let you write in your book! By tapping them and choosing the "note" feature you can leave yourself notes, record your thoughts, etc.



This year you will be studying the geography of the world in which we live. Right off the bat, think about what you already know about geography - it could be things you have learned in other classes at other grade levels, things you've heard from your parents, or things you've heard from teachers. What comes to mind? Is it maps? Latitude and longitude? What else?

What is Geography?

Interactive 1.1 What is Geography?



Take a moment to view this brief video online and then answer the question in the blue box to the best of your ability

Quite simply, “Geography” broken down means “to study the earth” and throughout your studies in the book, we are going to expand on this definition.



If you were to go home and ask your parents about geography they may have studied in school, they might say when they were students they memorized the states and capitals, or major countries in the world. This is only one part of what geography really is however. To study geography is to study where we are in the world; what the world around us is like. It is the study of who lives there and why. It can be the study of foods people eat, clothes they wear, cars they drive, and homes they live in. It is the study of climate, land, economies, politics and

culture. Like many of the disciplines in the social sciences, it is a discipline that weaves the threads of the others.

When studying geography we are going to focus on two aspects - **physical geography** and **human geography**. When we look at landforms, vegetation, climate, bodies of water such as rivers, lakes, and seas, we will be studying physical geography, the study of natural and physical characteristics. Human geography is different but related. It is the study of how people interact with the earth. It also includes culture, migration patterns, and patterns of population.

The study of something often begins with a question. This book itself is set around a series of questions, some smaller, some larger. Over the course of this entire world geography book, you will explore one major question: **“How are we, as members of a global society, connected?”** In each section of this book, we will bring you back to this idea and have you record any new thoughts and ideas that occur to you based on what you have explored in this book and through class instruction and discussion. You will be doing this as part of an interactive digital journal which you can view here.

Interactive 1.2 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

While the teachers who have put this book together have provided some questions to focus your study, you will be asked and encouraged to come up with your own questions as well.

The process you will be guided through is known as **inquiry** - the act of seeking out information.



Image source: [http://upload.wikimedia.org/wikipedia/commons/8/8c/Inupiat_Family_from_Noatak,_Alaska,_1929,_Edward_S._Curtis_\(restored\).jpg](http://upload.wikimedia.org/wikipedia/commons/8/8c/Inupiat_Family_from_Noatak,_Alaska,_1929,_Edward_S._Curtis_(restored).jpg)

How are the people in the picture above dressed? Why might people in this place wear clothing like this? If you notice the fur hoods surrounding their faces you might think it is cold where they live. If you investigated further, you would learn that this is a historical photo of an Inupiat family from Alaska. It might lead you to ask more questions - are there times of the year when they

would wear lighter clothing? What is the average temperature during winter? What is the average temperature during the summer months? One question about why people dress the way they do could lead to a series of new inquiries in the desire to learn more.

Gallery 1.1 Image Gallery



Image source: https://farm4.staticflickr.com/3302/3570407917_585dd5a1e8_o.jpg

View the image gallery above - practice asking geographic questions based on the images shown.

Using this Book - Tip #2

This is known as a “widget”. Depending on your device and the type of widget, when you click on this you’ll either be brought into an interactive experience that is hosted in the book itself, or on the website. All you have to do is tap on it or click on it and begin the interactive experience.



As you continue to study “the basics,” this chapter serves not just as an introduction to your studies this year, but also as a “how to use this book” in case this is your first time using a digital textbook to explore Social Studies. You will have an opportunity to practice most of the things you will be asked to do in this book during this introductory chapter. The last thing you will be asked to do is to once again revisit the question we posed at the start of this section. This time, you are going to write a brief response.

What is Geography, anyway?

Using this Book - Tip #3

A “blue box” such as the one on this page labeled “What is geography anyway?” is not really any different from the rest of the text in the book. The purpose however is for you to leave yourself a note as described above and answer the question for future review and study.



Why Do We Study Geography?

QUESTIONS TO GUIDE INQUIRY

1. What is geography?
2. Why do we study geography?
3. What tools do geographers use?
4. What is geographic inquiry?
5. Why do we need to think globally?

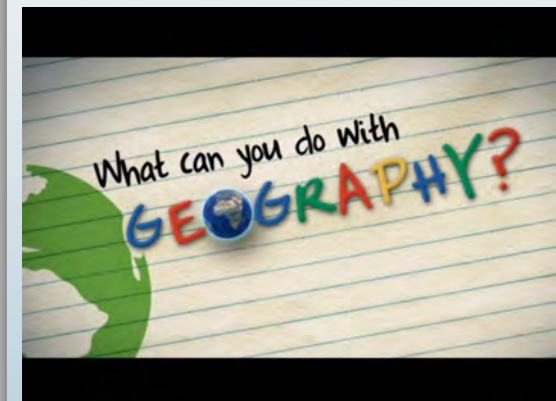


Image source: [http://upload.wikimedia.org/wikipedia/commons/3/32/JohannesVermeer-TheAstronomer\(1668\).jpg](http://upload.wikimedia.org/wikipedia/commons/3/32/JohannesVermeer-TheAstronomer(1668).jpg)

You might now have a better idea about what geography is, but why do we study it?

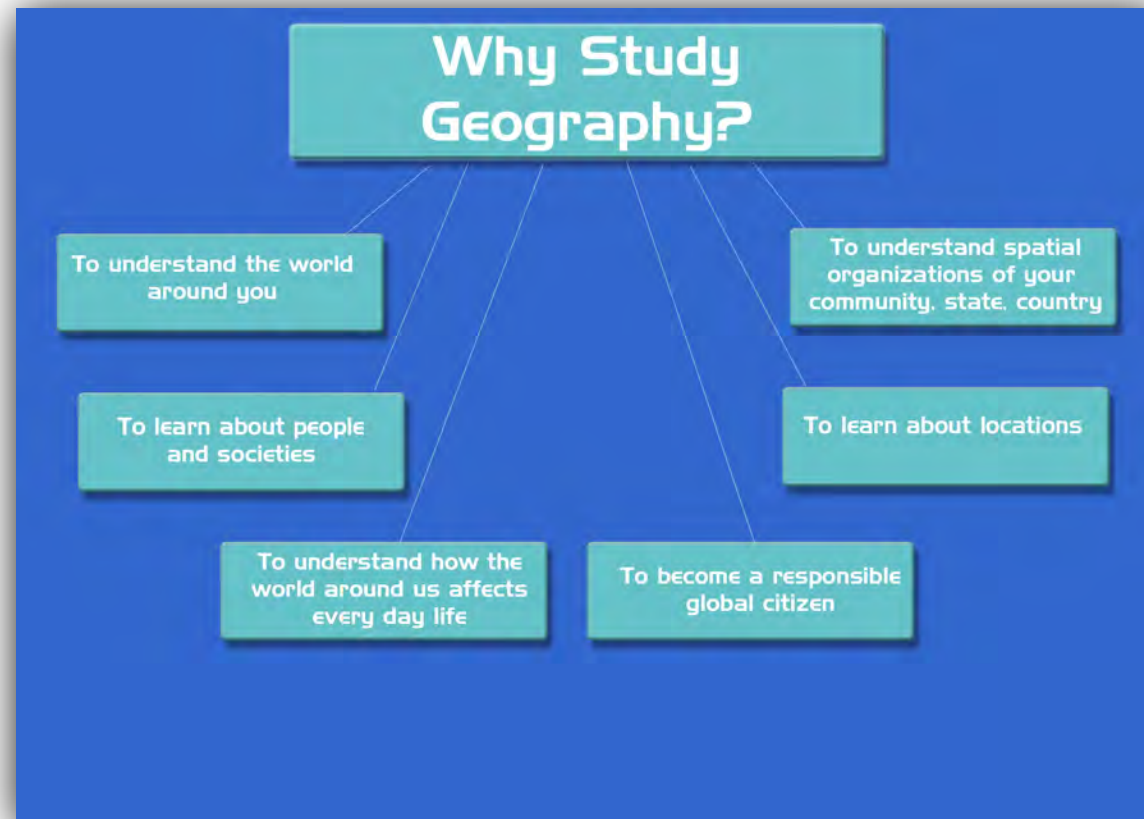
There are many reasons. Take a moment to view the video clip here about how some people use geography in their chosen professions.

Interactive 1.3 What can you do with geography?



Learn more about what geographers do with this YouTube clip (requires internet connection)

Why we study geography is a question many have asked. While to some geography is viewed only as maps, in reality it has links to science, mathematics, literacy, literature, and the other social sciences.



Studying geography can provide you with an overview of the planet upon which we live. People who study it are better equipped to understand topics such as why people live where they do, what causes people to move between places, how we use our natural resources, why countries and locations are broken up into geographic regions...the list goes on and on!

In addition to knowing about our planet and the people who live there, people study geography because it helps you learn to

think critically. It provides opportunity to inquire about the world around you and research to find answers.

Geographers study the “why of where” which can be simplified to “why there?” or “why here?” You may have studied the early history of the United States in other social studies classes. Where did early settlements like Jamestown tend to spring up and plant roots? It was generally around water sources. A geographer would then ask and seek to explain “why there?”

The image on this page is not an all inclusive list of why we study geography, but it does include many of the major reasons we will outline as you go through this book.



Winter sunrise at Michigan's St. Joseph Lighthouse
Image source: John McCormick/Shutterstock

Understanding the world around you - Why does Michigan generally have colder temperatures in the winter than Florida?

Why is a home on the beach so expensive? Have humans had an effect on the climate of the earth? When studying geography you can learn the answers to questions such as these which help you make sense of the world around you.

Becoming a global citizen - Back in the early 1900s it could take a person coming from Europe to America over a week to make it from one port to the next. Now, flights leave major airports and have people at their destination within hours. When a natural disaster happens in one part of the world, it can affect daily life on another. A tsunami in Japan back in March of 2011 ended up

affecting more countries than just Japan. We are citizens of the United States of America, but no matter where we live, we are also residents of this ball of rock floating in space. What does that mean?

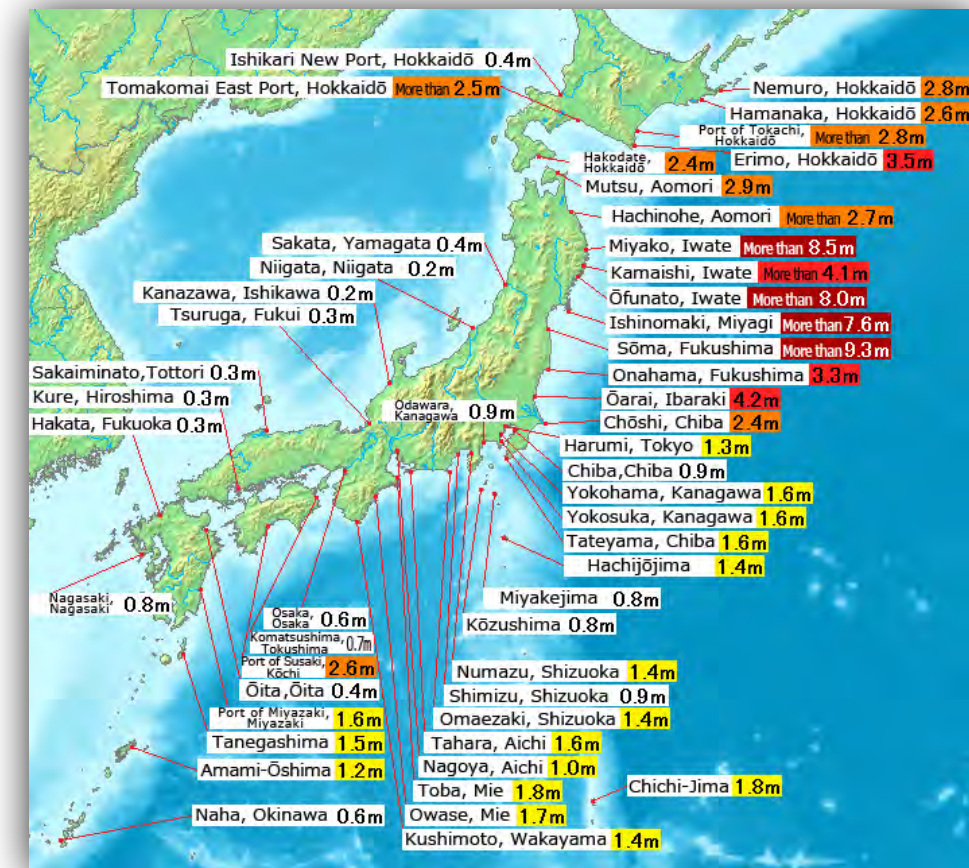


Image source: http://upload.wikimedia.org/wikipedia/commons/8/8d/2011_Tohoku_earthquake_observed_tsunami_heights_en.png

Learning about people and societies - If you slurp your soup in America, folks might call you rude. Burp at the table and it's possible your parents might send you to your room without any dessert. In Japan however, holding a bowl of soup and noodles up to your mouth to eat it is considered a sign to the chef that the food is delicious. Slurping and all! In parts of China, burping after a meal is considered a sign of appreciation. Religious customs vary from country to country - the five major world religions (discussed in more depth in later chapters) all help dictate traditions and customs in parts of the world. Studying

geography allows you to learn more than just where a country is located on a map, but what the people and society are like as well.



<http://upload.wikimedia.org/wikipedia/commons/2/23/JapaneseBosozoku.jpg>

Learning about locations - This may be the piece of geography that sticks in almost everyone's mind, but geography is the study of locations. We do this by studying maps, pictures, Geographic Information Systems data, visiting and exploring these places, among others.



Image source: http://upload.wikimedia.org/wikipedia/commons/1/12/World_map_2004_CIA_large_1.7m_whitespace_removed.jpg

Connections -

All of these things together help us explore the idea of how the world around us affects every day life, as well as the connections between how we relate to all of that.

For that reason, the inquiry question we will keep coming back to throughout the course of this book is:

“How are we, as members of a global society, connected?”

This question is not studied because there is a world government that unifies the planet, but more to help you realize that whatever country you are from is one of many, and that actions in one place can have effects on other places.

Take a moment to record your thoughts to that question. In the next section we will begin to look at some of the tools that geographers use.

Section 3

What Tools Do Geographers Use to Study the Earth?

QUESTIONS TO GUIDE INQUIRY

1. What is geography?
2. Why do we study geography?
3. What tools do geographers use?
4. What is geographic inquiry?
5. Why do we need to think globally?

Using this Book - Tip #4

In this book you'll many times come across an opportunity to look at a special kind of map. These maps which come from Google Maps allow you to explore more than just a single image printed in a textbook. You can zoom in and out at a variety of scales. At the bottom of the map widget you'll find + and - buttons which you can use to change the scale. Use + to zoom in, and - to zoom out.



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If you were to ask 100 people what tools geographers use to study the earth, one of the first answers you will undoubtedly hear will be “maps.” And it is true that maps are one of the most common tools used to answer geographic questions. A map is a visual representation of the earth, or parts of the Earth and can showcase a variety of **spatial scales**.

What are those spatial scales? You can represent a very small portion of the map with great details. Below is an

A Note On Scale:

The map activity on this page is set to focus on a city in Northern Michigan at the most zoomed-in scale. This is the smallest scale for a map because objects like buildings and roads are shown at their largest size. At a more zoomed-out scale, objects like buildings and roads may be so small that we cannot see them.

Interactive 1.4 Google Drive Journal Activity



Refer to this handout together with the Google Maps widget.

Interactive 1.5 Google Maps



embedded map from Google. It is set to a city in Northern Michigan zoomed in as far as that particular map can go to. Take a moment to explore that map at different scales and then complete the Google Drive journal activity located here.

Maps

Maps are able to show information about geographic areas. Every map has at least one purpose. They can represent a place such as a neighborhood, a town, a country, or the world overall. Sometimes they can show human features. In the very first map you looked at in the Google Maps link above, what human characteristics such as roads, buildings, etc. were you able to see? When you zoomed all the way out, were you still able to see any human characteristics?

When your parents were younger, they probably went on a trip with their families which involved using a map of a state or region to get to their final destination. Modern technology such as smart phones have GPS built in which has made these two dimensional maps obsolete for that purpose. A road trip is not the only use for a map of a city or a state, however. Maps can represent a variety of different features about a place. There is a small problem with maps however...

Interactive 1.6 The Orange



If you were to take a balloon and inflate it, then draw a map of the world on it, you could, if you were careful, get a very close approximation of what the world overall looks like. If you were extremely careful you could represent the continents of the earth drawn to a precise scaled size. This is because a balloon is a round, three-dimensional object. A map, however, is a two-dimensional object. If you were to pop that balloon (much like peeling the orange in the video above) what you are left with is a much less useful representation of the earth.

In an attempt to represent a three dimensional object in two dimensions, mapmakers, known as cartographers, have created different ways to represent the earth. These are known as map projections. There are hundreds of different types of projections and each has plusses and minuses in its usage.

Interactive 1.7 Map Projections Video



Learn more about map projections with this video. (Requires internet connection)



Take this map for example. This is known as a Mercator projection. A Mercator projection would be an excellent map for a navigator on a ship. In fact, this kind of map was extremely useful in navigation. One of the problems with this map is the distortion of size. If

you look at Greenland on this map, it appears to be huge.

Australia, the small continent in the bottom right hand portion of the map, looks like it is much smaller than Greenland. In actuality however, Greenland is much smaller. Antarctica almost appears to be as large as the rest of the continents together. So, while a Mercator Projection is a great map for use in navigation, it does not project the world as it is due to the distorted size of certain areas.

Another well known map projection is known as a Gall-Peters Projection, or more commonly, a Peters Projection. There is a great controversy surrounding the origins of this map, which you might want to take a few minutes to look up in the future. In a projection such as the one above, parts of the world are

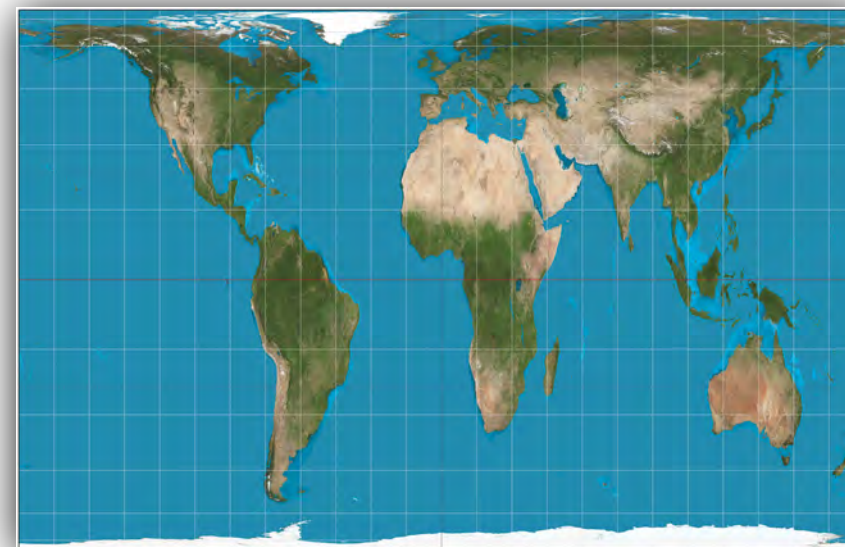


Image source: http://upload.wikimedia.org/wikipedia/commons/3/34/Gall%20%80%93Peters_projection_SW.jpg

represented closer to their actual scales. If, however, you compare this map to the Mercator projection, what do you notice about

the shape of land masses? There is a distinct distortion somewhere on the map.

The next projection we will take a look at is known as a Robinson Projection.

Generally speaking, a Robinson projection is an attempt to compromise and show the landmasses as close to their natural size and shape as possible

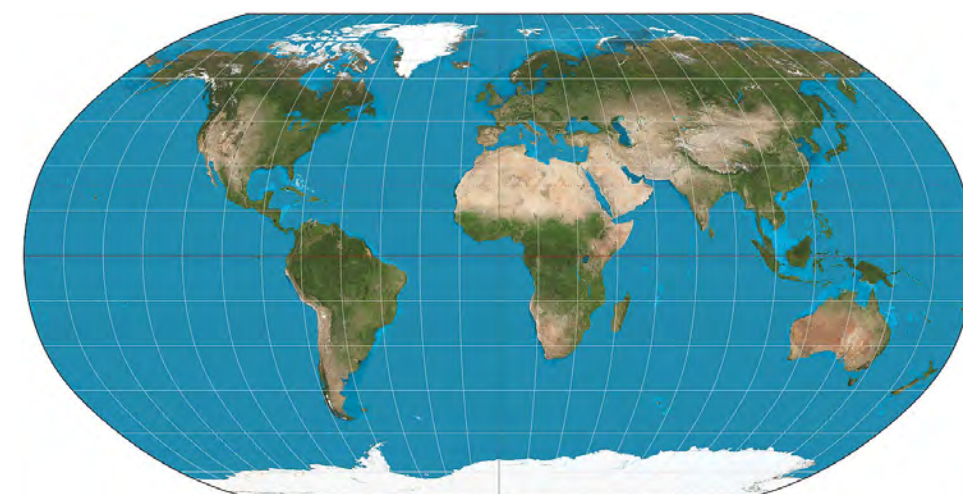


Image source: http://upload.wikimedia.org/wikipedia/commons/thumb/9/96/Robinson_projection_SW.jpg/1280px-Robinson_projection_SW.jpg

on a two dimensional representation. It too, however, suffers from distortion. In this case, much of the world is shown as close to scale as possible, but as you move toward the top and bottom of the map, what do you notice happening?

Now, think back to the video you watched at the beginning about the orange. Another projection is known as the Goode Homolosine Projection, more commonly known as an Interrupted Projection. In this projection type, there is very little distortion in terms of size of continents, however it is very difficult to calculate distances on a map such as this. If you were taking a plane ride from New York to London, it would be difficult to figure out the exact distance if this were the only map available to you.

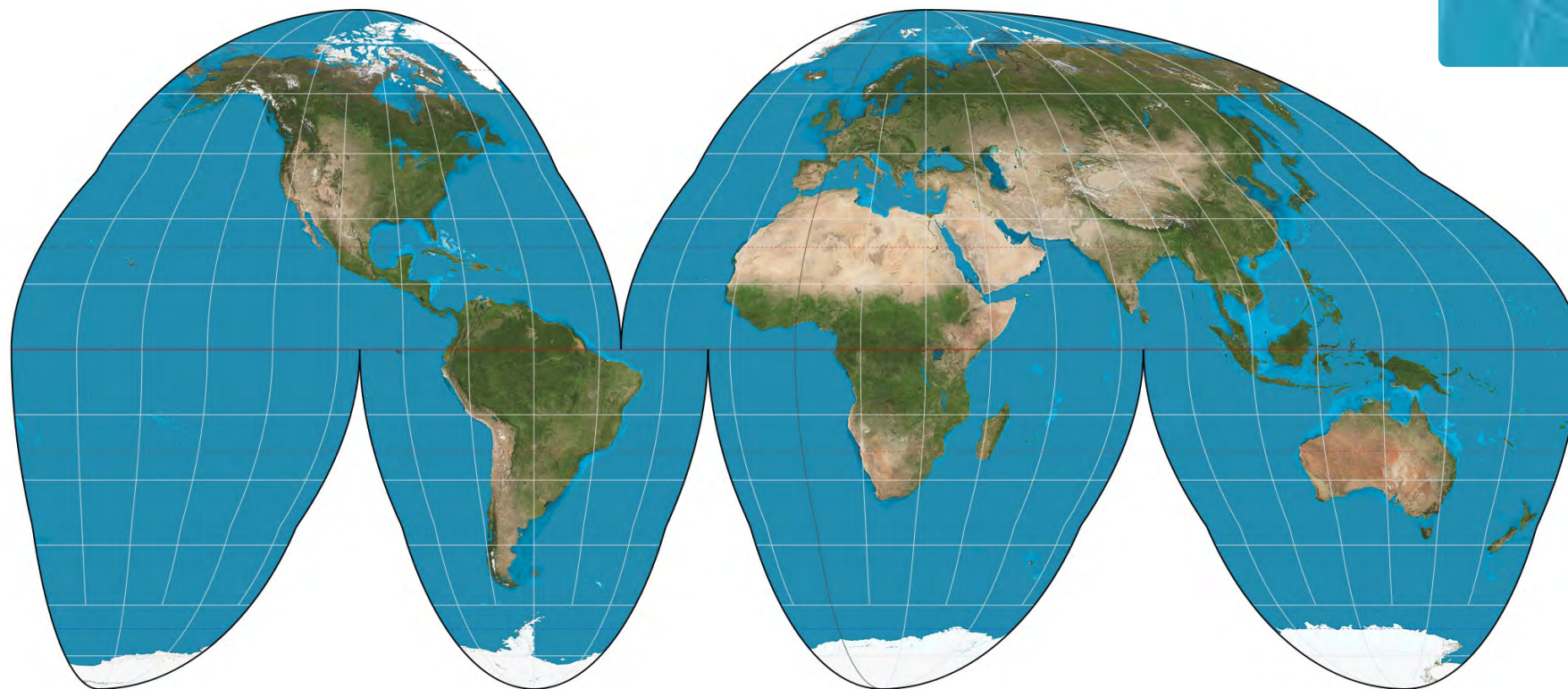


Image source: http://upload.wikimedia.org/wikipedia/commons/f/f2/Goode_homolosine_projection_SW.jpg

Below is a gallery of many different map projections. As you flip through the gallery, think about how each map might be useful, and what the disadvantages of the map might be.

Gallery 1.2 More Map Projections





Image source: http://pixabay.com/p-92367/?no_redirect

So, yes...maps are one of the many tools that geographers use to study the earth. But what are some of the others?

Aerial Photographs and Satellite Imagery

When you look at the image above, what do you see? This is a satellite image captured of the United States. The “gold” on the map represents city lights, which in turn can help someone studying this image understand where some of the major metropolitan areas are in the United States. You will notice that

one portion of the United States seems to have a lot of these lights, while large portions of the Western half of the United States are much spottier. A “why” question a geographer might ask about this would be: “Why are there



Image source: http://upload.wikimedia.org/wikipedia/commons/d/da/Washington,_D.C._-_2007_aerial_view.jpg

more large urban areas on the eastern half of the United States than the western half?” By looking at this image, geographers might then look at maps and other aerial photographs to get an answer to this question.

A satellite image has many purposes and can be helpful at a variety of spatial scales from large to small. An aerial photograph is similar to this, but is generally speaking at a larger. The aerial photograph that shows Washington, DC, shows a zoomed-in view of a city at a larger scale in which we can see individual buildings and streets. A picture like this one might help someone study patterns of development for neighborhood planning. It could be useful in surveying an area for a potential building project. Other aerial photographs could be useful in determining location of farmland, where irrigation systems could be created, among many other things. Both of these tools are useful for geographers in answering their “why” and “where” questions.

GPS (Global Positioning Systems)

Do your parents have a smartphone they sometimes use to get directions to places they have never been? What about you?

Global Positioning Systems (commonly referred to as GPS) make use of satellites in orbit to collect information about where the user is on the earth. Your GPS device, be it a phone or a commercially available



Image source: http://upload.wikimedia.org/wikipedia/commons/5/59/GPS_Receivers_2007.jpg

stand-alone unit, sends information up into the sky where it connects with a satellite, which then determines your position on the planet. This information is then relayed back to the user and displayed on a map. Aside from just locating yourself on a map, how might GPS be a useful tool for geographers?

GIS (Geographic Information System)

A geographic information system, commonly referred to as GIS utilizes software and hardware to collect and display data. It can help you display forms of information useful for geographers to explore. It is a combination of map making (cartography), data

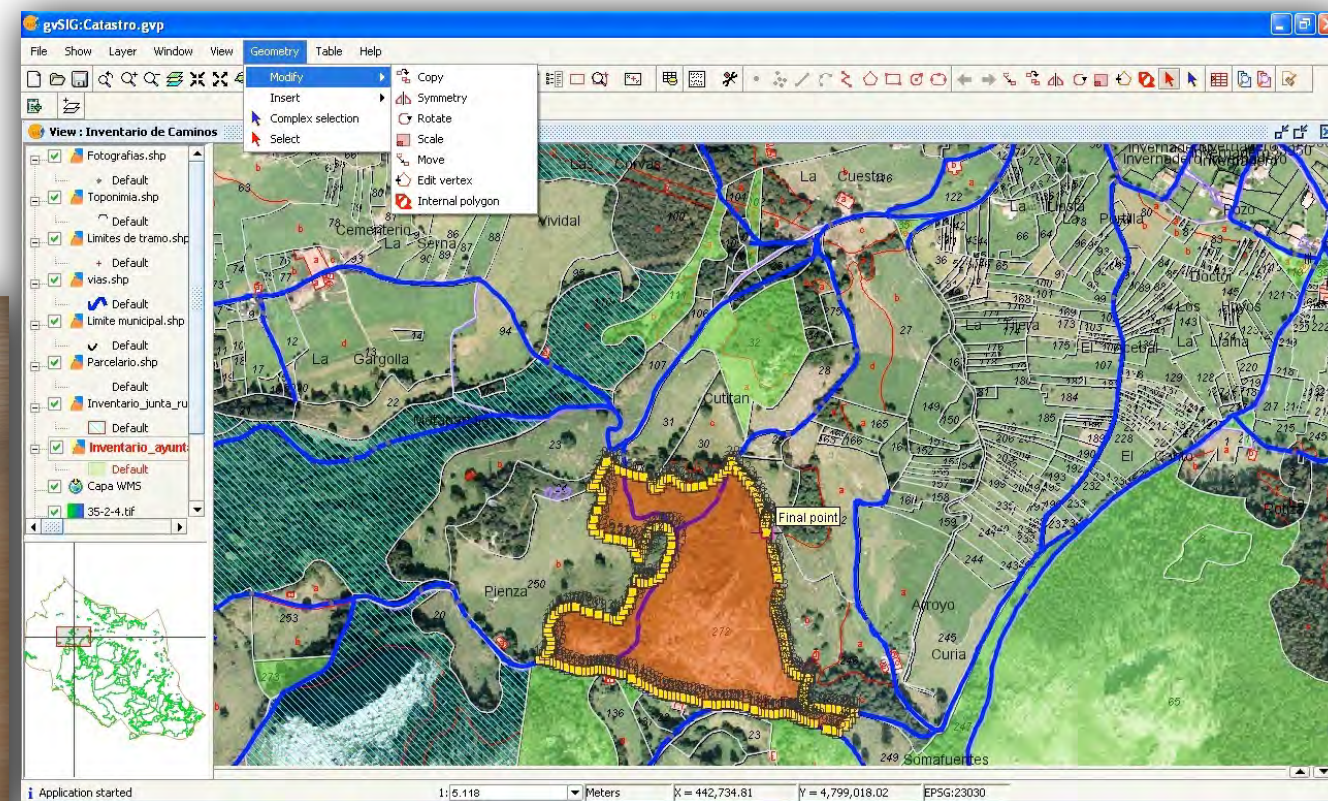


Image source: http://upload.wikimedia.org/wikipedia/commons/3/33/GvSIG_-_GIS.jpg

about places, and computer technology to create a representation of places. Someone who uses a GIS is then able to create a representation of places by layering information on top of the map and allowing the people using them to manipulate information in an attempt to better understand a place.

Other tools

You may not initially think of things like stories, people, charts, tables and graphs as being things a geographer might use, however, even with a wealth of other tools such as maps, satellite imagery, and GPS and GIS available, more information is needed in pursuit of the answer to the questions of “why” and “where.”

In this case, geographers use some of the same tools as everyone else to explore and learn more, such as data in tables, and charts and graphs which can help with numerical data about a place. If a geographer is trying to understand why people settled in a given area, they might look back at historical data about when people came to a region in an attempt to understand why. They might also look at primary source documents - first hand accounts from people who lived during the time to get a sense of why people came there. If movement to this region was recent, they might even interview living people to get clues.

What has been outlined in this section is by no means a full list that shows you every tool a geographer can use. It focused on some of the most common ones, and you'll get practice with these and many more throughout the book.

Return once more to the “What Tools Do Geographers Use to Study the Earth” note guide. There is one final question for you to explore before moving into the next section.

Interactive 1.8 Google Drive Digital Journal Activity



What is Geographic Inquiry?

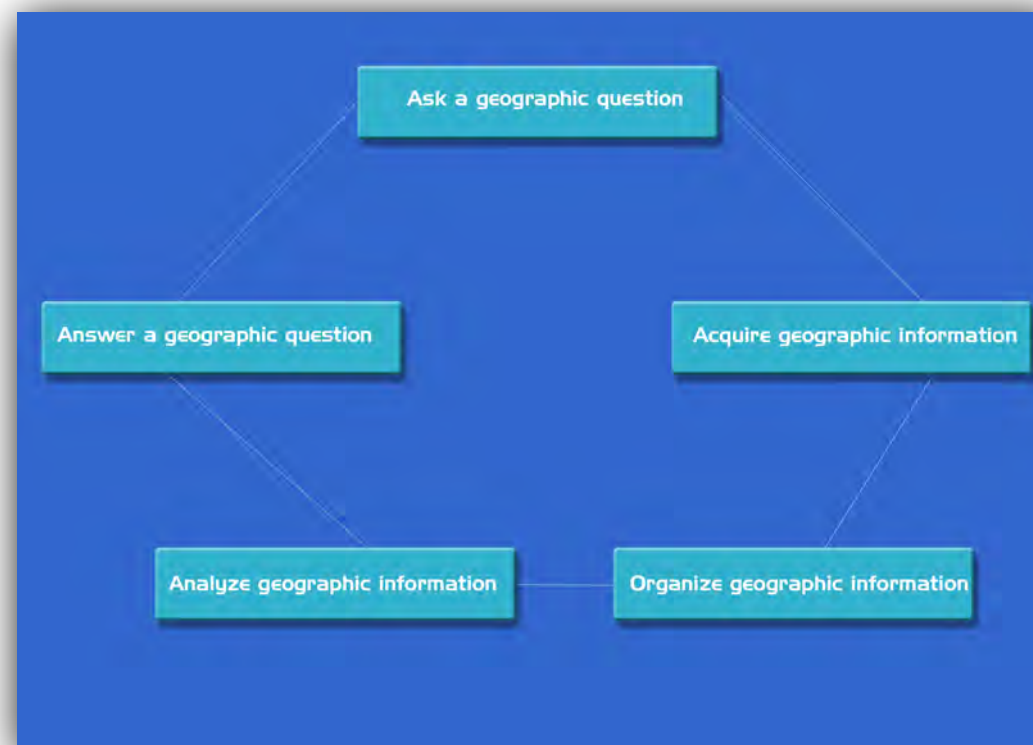
QUESTIONS TO GUIDE INQUIRY

1. What is geography?
2. Why do we study geography?
3. What tools do geographers use?
4. What is geographic inquiry?
5. Why do we need to think globally?

So far you have learned about what geography is, why you are going study it, and what tools geographers use. One of the most important things to remember is that just like people in every field, geographers ask questions. Geographers go through an inquiry process every time they ask themselves a question on something that interests us, whether we are aware of it or not. The first step is asking the right question. From there, you go out and find the right information.

You evaluate, sometimes without knowing it, whether the information is “good” or not, before finally coming up with your conclusion. These are all steps in a good inquiry process.

Geographic inquiry is no different. For the purposes of this book the following process will be used:



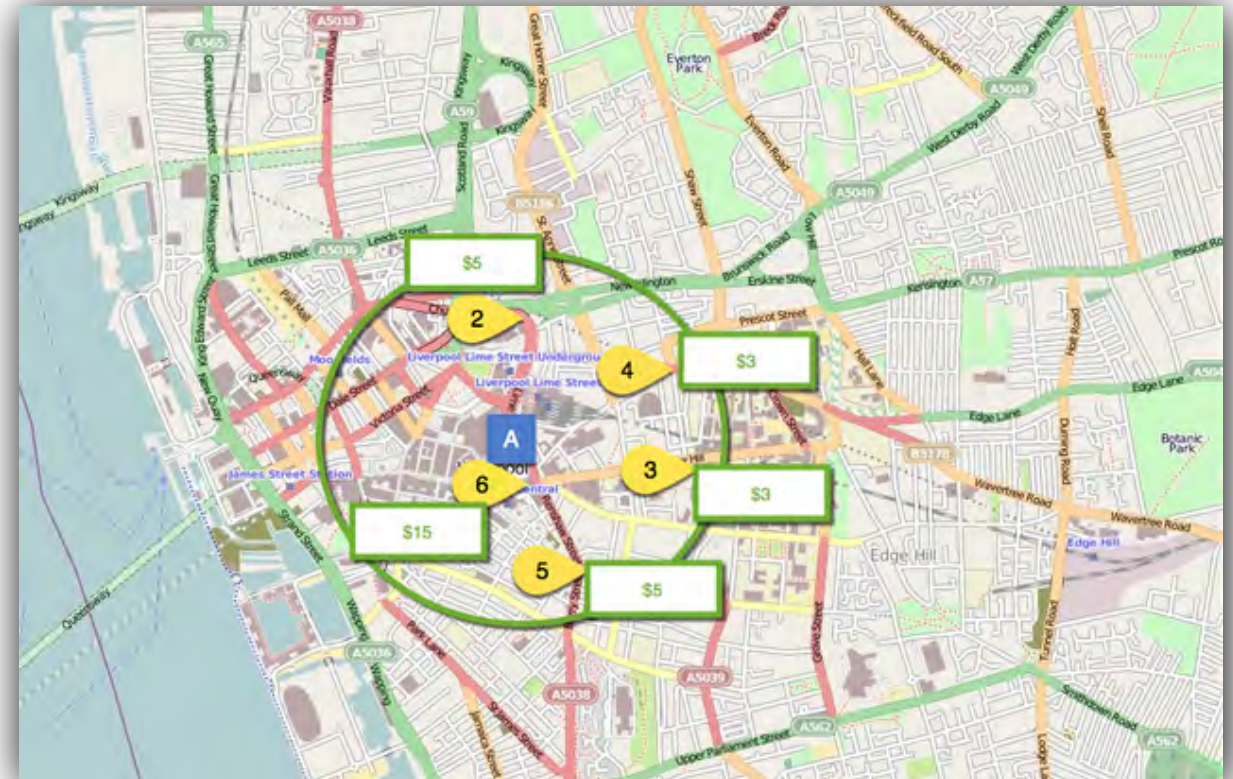
Ask a geographic question

To begin any inquiry, you need to have a question in mind. If you are having a hard time beating a boss in a video game, you might ask “How do I get past the level 12 boss?” This is certainly a question you can research, but it probably is not a question a geographer would use. Geographers are going to ask questions about where things happen, what happened, and why it happened. Two geographers headed to a rock concert (music, not stones) might wonder why it costs \$15 an hour to park their car in the lot right next to the venue, the place where the concert happens. This is one of those times where economics also comes into play. If they drove several streets over, there might be cheaper parking lots. In this case, they may think the answer to this question is “convenience.” The closer you are to your destination, the more expensive it is to park there. To be certain however, they are going to have to do a few more things.

Acquire Geographic Information

The second step once you have your question is to go out and gather some information. In the rock concert example above, a geographer probably would not look at a world map to figure out where to park, but if you think back to the geographic tools we discussed in the previous section, you might look at aerial photographs to see where available parking might be. You might

also use a map that is more zoomed in so you can see more specifically how streets connect a parking lot to the concert site. All of this information helps you as you begin the next stage of geographic inquiry.



Organize Geographic Information

The date of the concert is approaching and the geographers' excitement grows. They do not want to pay too much, however, so now that the question has been asked and they have an opportunity to collect some resources, it's time to explore and organize that data. As they look through aerial photographs of the area to determine the number of parking lots in walking

distance of the concert venue, they also might have received information from the city website on how much the parking costs at various locations. At this point they may create their own special map which showcases prices. Once this is done, they are ready for the next step.

Analyze Geographic Information

Once their map has been assembled with the most up-to-date data they have available, it is easy to see the available public parking lots that are the furthest away from location A (the concert venue) are cheaper than the ones located right near the venue. While our example has been relatively simple, sometimes it takes a long time to analyze the geographic information that has been collected and organized in response to a geographic question. And sometimes, as you get further into the inquiry process, you might need to return to earlier steps. Perhaps it is asking a different question. Maybe you need more information to reach your conclusion. Inquiry can be messy, but once you have the right question and the right data, you can move to the final step.

Answer Geographic Questions

Finally, the day of the concert arrives and our geographers are ready to attend with all of the best knowledge on where to park in the city. Not only are they going to attempt to land themselves a parking spot at points three or four on the map so they have more money for souvenirs, but they conduct a little more geographic inquiry to figure out how long it will take them to walk from their parking spot to the venue. They leave secure in the knowledge that they went through the geographic inquiry process to answer the important question about why parking so close to the concert venue is more expensive.



Image source: Andrey Yurlov, Shutterstock

Chapter 2

North America

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. How do people, goods and ideas move?
4. Why do people, goods and ideas move?

Image source: <https://www.flickr.com/photos/walkingsf/5912385701>

Introduction - Movement and North America

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. How do people, goods and ideas move?
4. Why do people, goods and ideas move?

Movement

How do we move from place to place?
How do ideas move from place to place?
How do products move from place to place?



Regions

What region do we live in?
What are a region's characteristics?
What type of region is it?
What makes a region?



Human/Environment Interaction

How have we adapted to or changed our landscape?



Location

Where are we?
Where is a place?



Place

What kind of place is it?
What is it like there?



The movement of people, the import and export of goods, and mass communication have all played major roles in shaping our world. People everywhere interact through movement. They travel from place to place and they communicate. We live in a global village and global economy.

What is movement?

What factors push or pull people?

People interact with each other through movement. Because we are social beings, we interact with each other through travel, trade, information and political events.

Interactive 2.1 Movement



Learn more about this theme of geography in this video (requires internet connection)

What is an example of an idea that moves?

How do we depend on people in other places?

How do they depend on us?

What resources are where you live?

Who uses the resources?

How could people around the world use these resources?

The Geography of North America

The landmass of North America lies in the Western Hemisphere. It is bordered by the Arctic to the north, the continent of South America and the Caribbean Sea to the south, the Atlantic Ocean to the east, and the Pacific Ocean to the west. The land is rich in resources like coal, natural gas, oil, timber products, freshwater, and an abundance of plant and animal species. Renewable resources such as wind, water, biomass, geothermal and solar are widely used as well.



Image source: http://upload.wikimedia.org/wikipedia/commons/2/29/North_America_satellite_orthographic.jpg

Climate Zones of the Continental United States

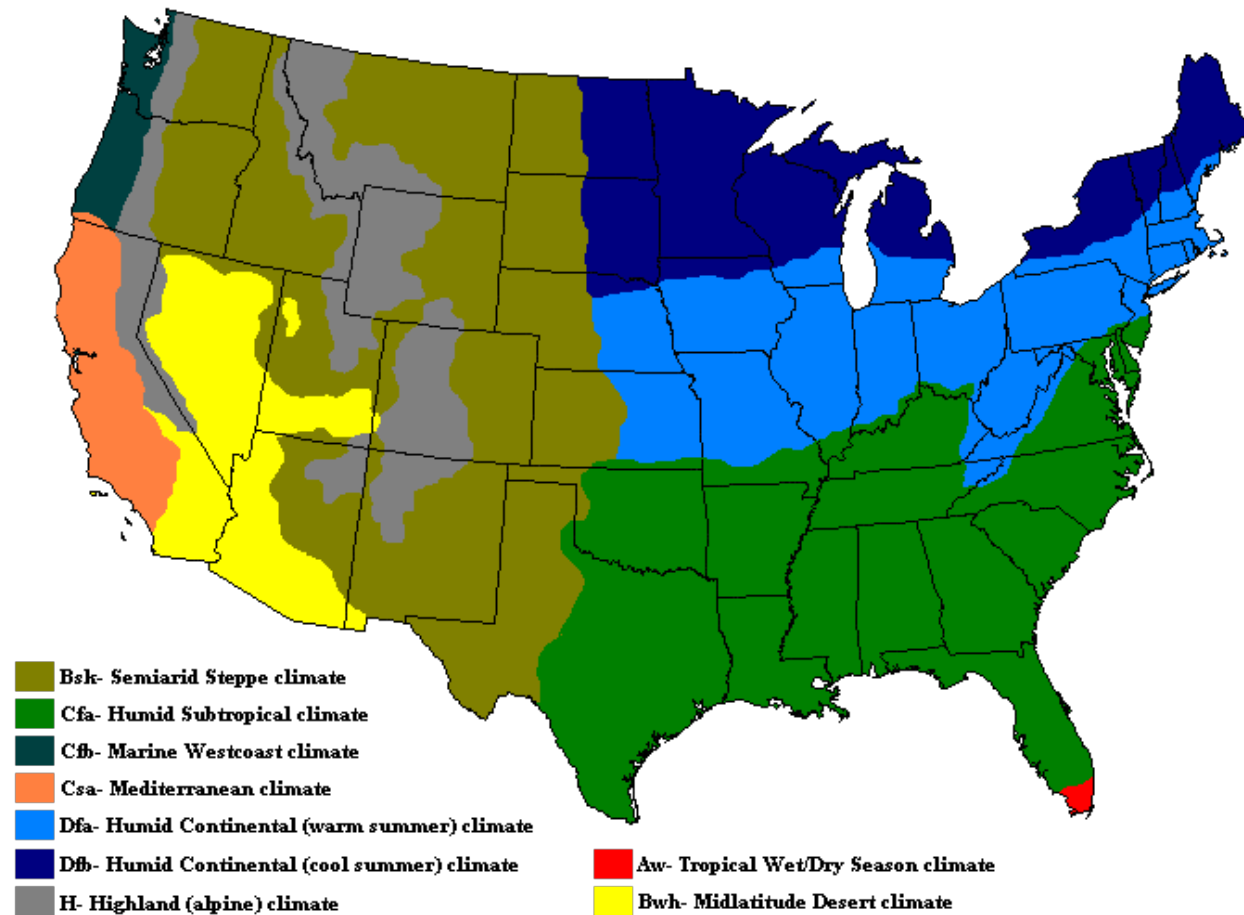


Image source: <http://upload.wikimedia.org/wikipedia/commons/5/57/Climatemapusa2.PNG>

The land is very diverse with a variety of climates, vegetation zones and various other geographical features. Due to its latitude and longitude, the climates range greatly. Around the Arctic Circle, the climate is cold and is home to the Tundra region and very barren land masses covered in snow and ice. Move closer to the equator and the climate and vegetation change. Although the elevation varies due to the Rocky Mountains, this region contains the Great Plains, forested and desert regions. In other

places, the land narrows and contains a wide variety of climates and vegetation zones for such a small area.

With an abundance of fresh water, North America is truly blessed. The Mississippi River is one of the world's major river systems in size, habitat diversity and biological productivity. It is the third longest river in North America, flowing 2,350 miles from its source at Lake Itasca through the center of the continental United States to the Gulf of Mexico.



Image source: http://upload.wikimedia.org/wikipedia/commons/5/57/Great_Lakes_from_space_crop_labeled.jpg

The Great Lakes - Superior, Michigan, Huron, Erie and Ontario - are a dominant part of the physical and cultural heritage of North America. Shared with Canada and spanning more than 750 miles from west to east, these vast inland freshwater seas provide water for consumption, transportation, power, recreation and a host of other uses. The Great Lakes are the largest surface freshwater system on the earth. Only the polar ice caps contain more fresh water.

The First Americans

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. What's worth moving to and from?

As you read this section, think about the following questions.

How do we know these people moved?

What evidence do we have that they traveled and settled?

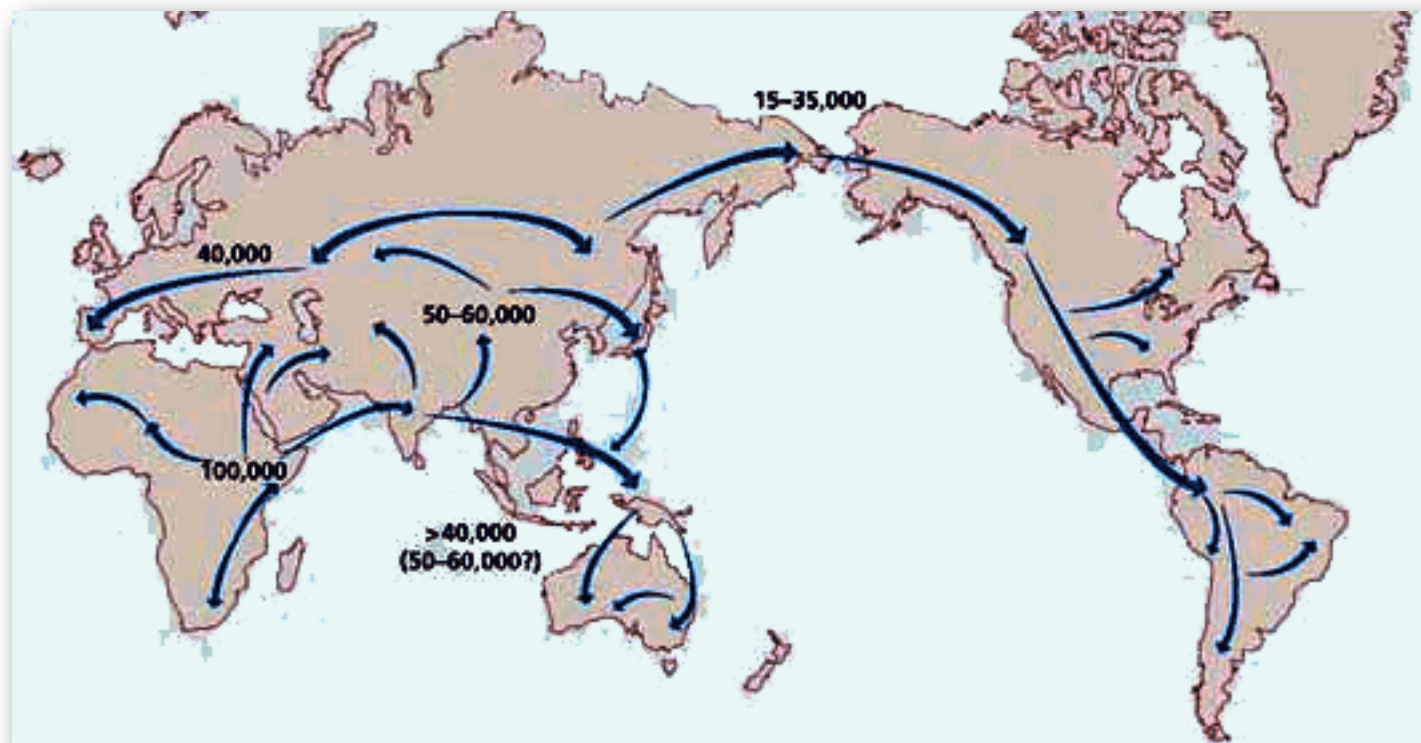


Image source: http://upload.wikimedia.org/wikipedia/en/c/c8/Human_migration.png

Over 15,000 years ago, a land bridge was exposed in the Bering Sea. During this time groups of hunters and gatherers crossed this barren wasteland to follow migrating animals. Many scientists believe that this land bridge was the gateway to early settlement in North and South America. The area is still known today as Beringia.

This was perhaps the first great movement to the Americas by any group of people. Beringia became a key migration route for

humans, plants and animals. Today, it is a preserve that lies 42 miles from the Bering Strait. This area of Northeast Alaska and Eastern Russia is still home to the ancestors of people today.

This heritage lives on in the culture of these people and can easily be seen in their language, traditions and way of living.

The following section is a little controversial. After reading and discussing in class, you can form your own opinion. Is it fact or false? Why?

Other scientists believe there were people who crossed the Atlantic prior to the Clovis period. These people are thought to have been outcasts or lost seal hunters from south western Europe. Whether a result of shelf ice detachment or lost hunters traveling by foot or kayaks, there is evidence that suggests these people moved and settled in what is now present day Nova Scotia, Canada.

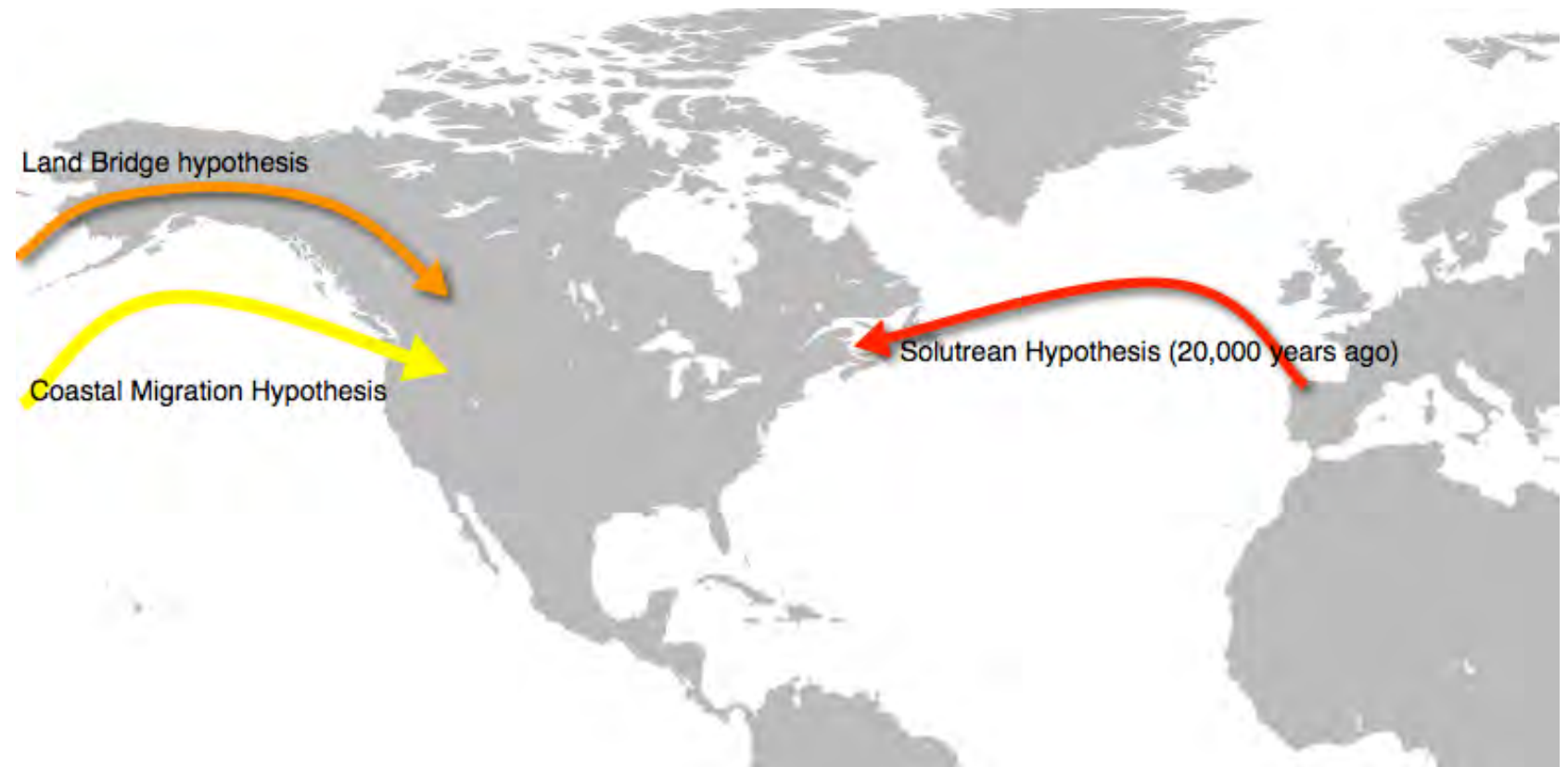
Like the land bridge people, grasses and animals could have enticed these ancient travelers to migrate west and then south along the Atlantic coast of America. These people were the Solutreans.

The Solutreans theory began when tools found in Virginia were the same as tools found in Western Europe during the Solutrean period. This relatively new information is highly debated due to cultural characteristics like language and other artifacts found in Europe.

Archaeologists have unearthed bones and tools resembling that of ancient Europe and are believed to be older than the Bering crossing. These tools and remains are much older because the move would have been from east to west. These people would have moved the shorter distance.

These theories explain the two movements from early humans. Over time, these first Americans spread out all over North and South America. They developed their own way of living in the environment they chose.

No matter what theory is ultimately deemed possible, these people moved.



Map of the three migration hypotheses

Questions:

Why do people move?

Put yourself in their shoes, what would cause you to move?

The Vikings

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. What's worth moving to and from?
4. What factors push or pull people?

Think about this:

How different would North America be if Eriksson had started a settlement in Vineland?

How would the settlement affect future explorers such as Columbus, Cortez and others?

The Vikings

Hope is both the earliest and the most indispensable virtue inherent in the state of being alive. - Leif Erickson

Leif Eriksson was the son of Erik the Red, founder of the first European settlement on what is now called Greenland. Around A.D. 1000, Eriksson sailed to Norway, where King Olaf I converted him to Christianity. According to one school of thought, Eriksson sailed off course on his way back to Greenland and landed on the North American continent where he explored a region he called Vinland. He may also have sought out Vinland based on stories of an earlier voyage by an Icelandic trader. After spending the winter in Vinland, Leif sailed back to Greenland, and never returned to the North American shores. He is generally believed to be the first European to reach the North American continent, nearly four centuries before Christopher Columbus arrived in 1492.

Interactive 2.3 The Vikings



Learn more about the Vikings exploration of North America with this YouTube video (requires internet connection)

The Europeans

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. What's worth moving to and from?
4. What factors push or pull people?

Where are you located?

What crops and animals are grown and raised?

Did they originate there?

Who brought them to your area?

The Columbian Exchange refers to the widespread movement of animals, plants, culture, human populations, communicable diseases, technology and ideas between the American and Afro-Eurasian hemispheres in the 15th and 16th centuries. This occurrence is related to European colonization and trade, including the atlantic slave trade, following Christopher Columbus' 1492 voyage.

This process between the two regions moved a large variety of fruits, vegetables and domesticated animals between the continents. Side effects included a population boom in both places and an increase of disease particularly amongst Native Americans in the Americas. Traders returned to Europe with maize, potatoes, and tomatoes, which became very important crops in Europe. Similarly, Europeans introduced manioc and peanut to tropical Asia and West Africa, where they flourished in soils that otherwise would not produce large yields.

The Spanish

Christopher Columbus, in the year 1492, sailed to the new world. He was searching for an easier path to the West Indies for trade. The lives for millions of indigenous people would be forever changed by this event. This event opened a



Research:

Choose any fruit to spend a little time researching. Where did it come from?

How have domesticated animals changed your region?

flood

gate of migration from Europe. Along with the Spanish, Great Britain and France became key players in the migration of millions of people to the Americas.

The Atlantic Slave Trade

Africans were forced onto slave ships, by European countries for over 300 years. These people were transported across the Atlantic Ocean in horrible conditions. Captain John Hawkins, led the way for the British in the Transatlantic Slave Trade.

Starting in the late 1400s, Hawkins captured over 1300 Africans and sold them in the Americas. The willing buyers were the Spanish and Portuguese colonists. As the new world was settled and thus more populated, these slave traders supplied British colonies as well. The estimated number of transported slaves

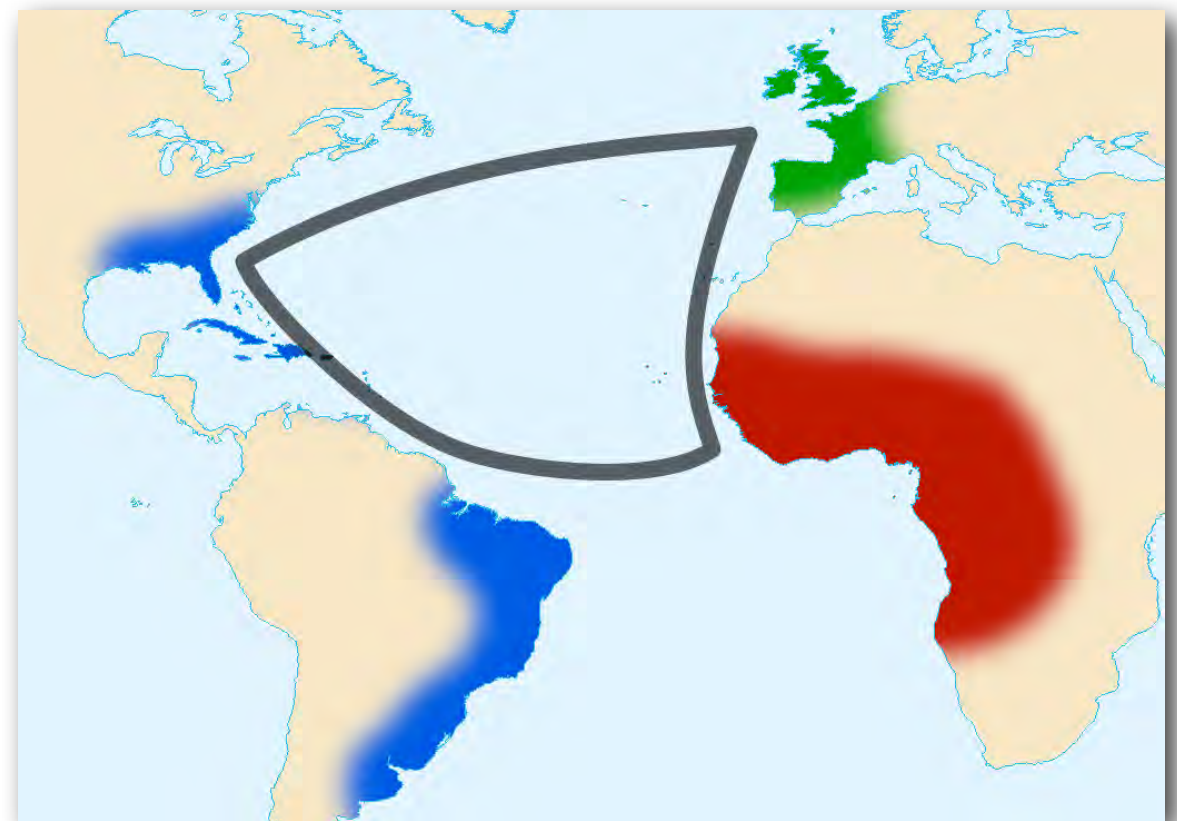


Image source: http://commons.wikimedia.org/wiki/File:Triangular_trade.png

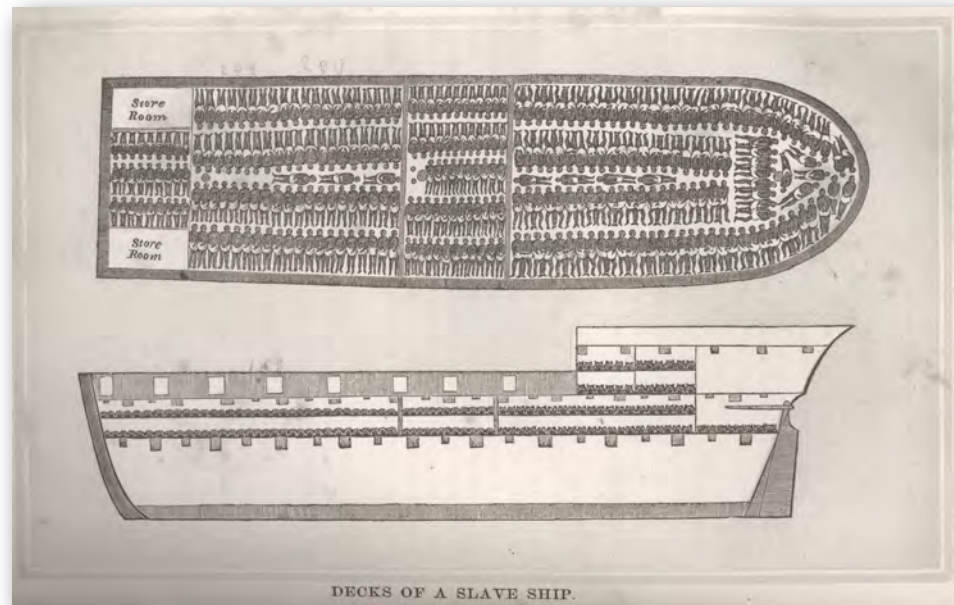


Image source: <http://www.tablespace.net/maps2/lowres/HumanCargo.jpg>

runs around 3.4 million.

The willing buyers used these slaves to work on farms and plantations.

Laws were passed

restricting the rights of the slaves. Originally, Great Britain set up ports on the coast of West Africa and created a monopoly in the slave trade. Only British ships could dock there and transport slaves from these ports. Policies like this created interlopers.

Interlopers were illegal slave transporters who traded Africans at discounted prices. This caused a loss of profits, created less populated ports and lowered prices for the British crown.

In March of 1807, The United States and the British signed acts that prohibited the transportation of slaves. This did not abolish slavery by any means; it just restricted the transportation of Africans as slaves. Over the next couple hundred years the movement of people by illegal means posed serious international problems. The abolition of the slave trade was not internationally recognized until 2001.

Movement in North America Today:

People, ideas, and products move about Earth. Over the years, people moved by foot, animal, ship and automobile. Their products moved the same way. Their ideas moved faster and faster. Each move connected people from place to place. All these moves made us who we are today. From the first humans to come to North America by land bridge to the colonists who braved stormy seas. These people moved. Their products moved. Their ideas moved.

Multiple factors play into why they moved. Were they pulled by desire, food or just the curiosity as to what is on the other side of the horizon?

Were they pushed like the slaves on the slave ships? Slaves were physically forced to move

Interactive 2.4 Slavery Today



*Does slavery still exist today?
Learn more with this article from
the Washington Post*

Movement in North America Today

QUESTIONS TO GUIDE INQUIRY

1. Why do people move?
2. Why would you move?
3. What's worth moving to and from?
4. What factors push or pull people?

Moving People

Historically speaking there are many reasons why people move TO North America, but what does movement IN North America look like today?

People move. You've already learned about push/pull factors. Sometimes people and families move because of jobs and opportunities elsewhere. This kind of movement could be across a town, a state, a region, a country, or in between countries.

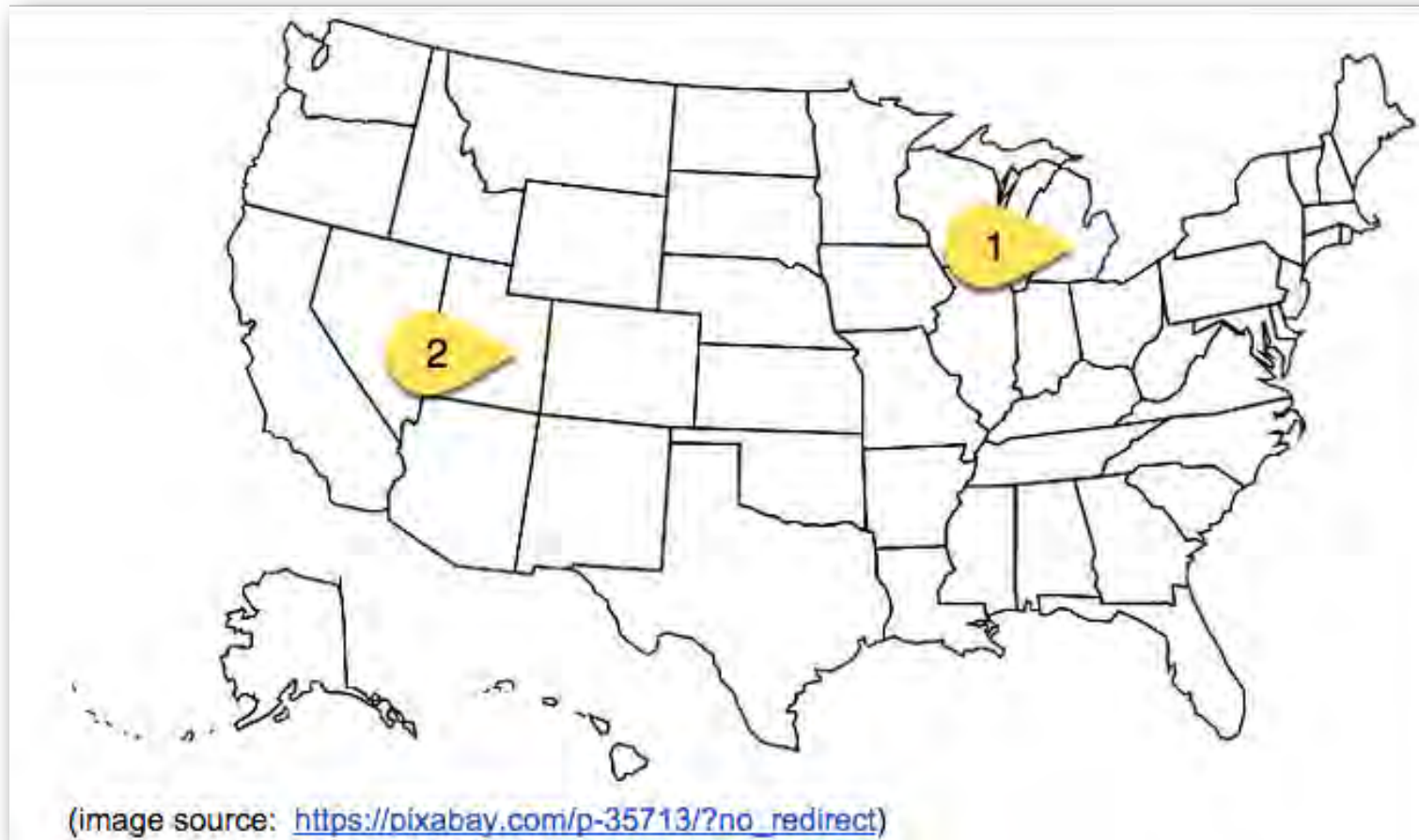
Movement of people can take place in a variety of ways. You've already read a little bit about historical methods of bringing people from place to place. Early migrations took place on foot. European migrations began on ships. Today people move in many ways. They can still travel on foot and on ship, though cars, busses, trains, and planes have all made the speed at which people can travel much faster.

Take a moment to look at the map below.

Let's pretend you live at point 1 on the map and you and your family are moving to point 2.

Based just off of this map, trace your finger over the route you might take to get there.

Do you draw a direct line connecting the two points? Do you travel south first and then move west? What method of travel is best?



It is difficult to answer some of those questions without some more information. Therefore, in practicing the skills of a geographer, here is a second map.

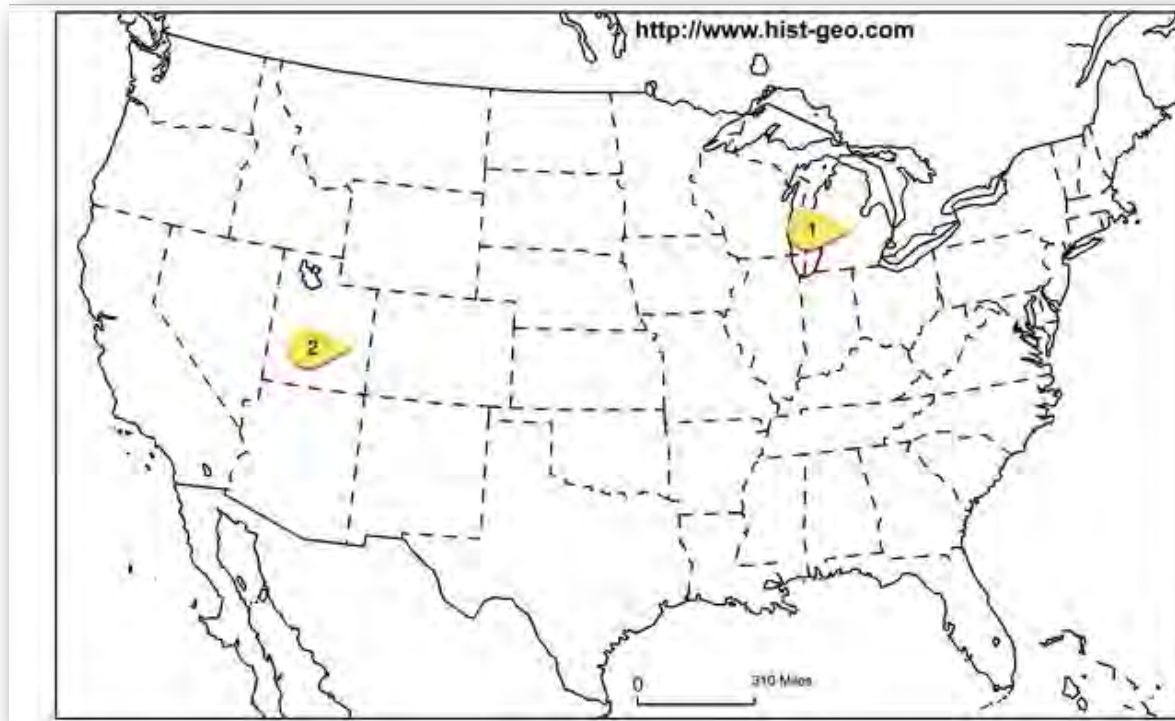


Image source: <http://st.hist-geo.co.uk/img/usa-48/USA-48-Etats-1.png>

You can see now that with a map scale added you can tell the distance between the two locations. Using a ruler or other measuring device, do the following:

1. **Determine the distance of the route you decided to travel on the previous map.**
2. **Calculate the number of hours this trip would take by car by dividing by 60**
3. **Will this change how you move from Point 1 to Point 2? Why?**

You may choose to drive to this location still, but doing so will probably require that you drive anywhere between 18-24 hours depending on the route you chose, and assuming of course that there are actually roads that lead to this location on the route you traced with your finger.

To make certain you can actually travel this route by car, you need to make certain that there are actually roads that get you there.

The fastest way will be to utilize the major United States highway system map. Using this map, are you still able to make the trip along your original route?



Image source: https://upload.wikimedia.org/wikipedia/commons/2/27/Interstate_Highway_System_Map.jpg

What are some reasons there might be fewer highways in certain places?

How does your answer to the previous question possibly relate to movement?

There is still one other thing to consider in this simulation. Even with the highway system in place, might movement from Point 1 to Point 2 be difficult at times? To get one answer to that question, you might want to take a look at yet another map.

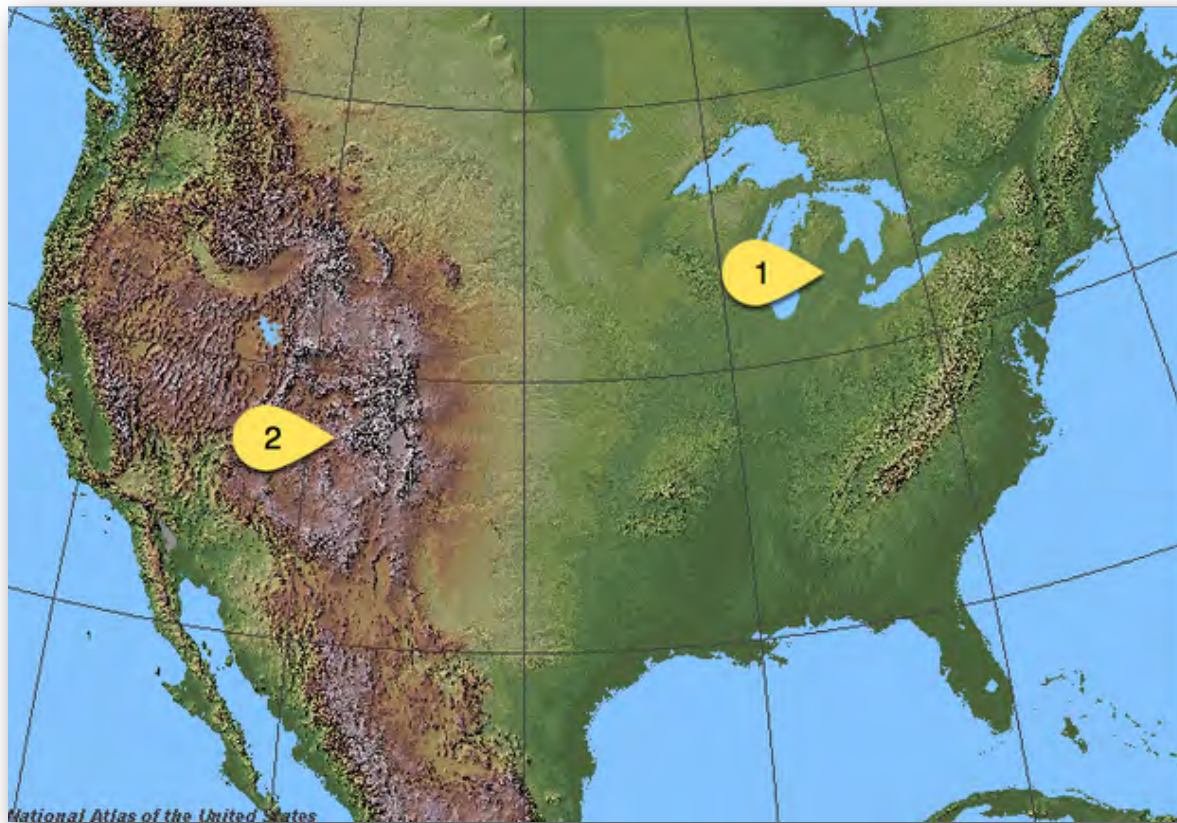


Image source: https://upload.wikimedia.org/wikipedia/commons/c/c8/ReliefUSA_map.gif

This map is a map that depicts the major mountain ranges of the United States. You can see from this map that Point 2 requires travel through mountains. If you're driving in an old car without enough power (and carrying your belongings in the back seat!) your trip might end up being a little difficult in certain places.

That isn't to say that you couldn't fly there. That trip would be much shorter and probably less expensive. You might also see if

there were train or bus routes that could get you there, though that method of travel would add length to your time.

Looking back at the maps, could you take a boat from Point 1 to Point 2?

Depending on where and how a person wants to move, the trip could be easy or difficult. Right now a person in North America could move almost anywhere on the continent and to places in Latin America by car with varying degrees of ease. If someone wanted to drive from New York to London England however, they would be unable to do so right now. Learn more about how the country of Russia would like to solve that problem in the future at this website.

Interactive 2.5 Road from US To Europe



Moving Products



Image source: https://upload.wikimedia.org/wikipedia/commons/a/a3/Froot_loops_in_a_bowl.jpg

What did you have for breakfast this morning?

How did that breakfast make its way to your kitchen?

The short answer to the questions you were asked above might be “food” and “my parents bought it.”

That food however came from somewhere. Sometimes it came from multiple places. While it is true that people travel to a store and purchase groceries, the movement of that product from the store to their home is only one step in a longer journey.

If you had cereal for breakfast, it’s possible you used a brand that was created in Michigan by Kelloggs, which made \$14.8 billion in revenue in 2014. Kelloggs foods has their headquarters in Battle Creek Michigan, and their cereals are manufactured and sold world wide. The factory in Battle Creek, as well as others around the country and world produces many kinds of cereal which you may have eaten this morning.

Some might be tempted to say that the journey of the product from the store to a home begins at the factory, but that is still not the case. All of the parts of a product, such as ingredients for making cereal, come from places outside of the factory. It could come from local sources, or much farther away - across a state, the country, or even the world.

Activity - Use the internet to find the ingredients in one breakfast cereal of your choice. Then, pick any three ingredients (such as rice, sugar, or salt) to find out where in the United States these materials might come from. If it does not come from the United States, where else might it come from? How might those ingredients “move” to the factory in which they are processed and turned into cereal?

The journey of an ingredient for cereal could begin hundreds or thousands of miles away from your house. If you live in Michigan however, it is quite possible that they made their way to Battle Creek to be made into your breakfast this morning.



(image source: [https://upload.wikimedia.org/wikipedia/commons/2/20/Warehouse_of_Grupo_Martins_in_Cama%C3%A7ari_\(Brazil\).jpg](https://upload.wikimedia.org/wikipedia/commons/2/20/Warehouse_of_Grupo_Martins_in_Cama%C3%A7ari_(Brazil).jpg))

It doesn't necessarily matter where your cereal was created.

Often times after production it is taken to centralized warehouses which deliver the products to many regional stores. The goods travel over land and by air depending on the distance they must travel.

All goods and products move in this way. If your family goes to a local farmers market and purchases apples, the journey from the farm to you may have been a relatively short one, but the product

still moved. If your family purchases an American made car from Ford, GM, or Chrysler, the parts came from all over the world, and it's possible that it wasn't even assembled in the state that you live in.

From apples to cars, to the breakfast you ate this morning, the theme of movement is taking place all across your town, your state, the country, and the world.

Moving Ideas

People and products move constantly, but a third major type of movement also exists. The third type of movement is the movement of ideas. Prior to the 1830s, movement of ideas could be very slow. To communicate across vast distances people either had to travel to a place themselves or send a letter which could take days, weeks, or months to arrive at their final destination.

While you will learn more about the major religions of the world in a later chapter, the spread of religion around the world can be traced to an idea called **cultural diffusion**, the spread of beliefs and activities from one group to another. In ancient times religions such as Christianity, and Islam spread along trade routes, with places in the world adopting the incoming religion, and others taking pieces of it which mixed with local customs.

When people moved from one region to another to trade goods, their customs came with them and often times spread. This was not a process that happened overnight, rather, it took a great deal of time. The fastest methods of communication generally involved people traveling long distances over long periods of time.

Fast forward a thousand years and communication became faster. The telegraph was invented in the 1830s. People could now send a message to someone across a large distance much faster, though it still required people to both send and receive the transmission, decode it, and deliver it to a recipient. The telegraph did however make the spread of information and ideas much faster.

Just forty years later, the telephone was invented. For the first time people could communicate with their voice over large distances. This also helped ideas and information spread faster.

As faster methods of travel became available, this also led to a faster spread of information.

Today however, many people carry a phone in their pocket which allows them to communicate with people all over the world instantaneously. That phone isn't just used to send your voice. Many phones come equipped with cameras allowing easy face to face communication. You can text a message, a picture, or a video to friends almost anywhere in the world and they can receive it within seconds.

People today can even communicate with people they have never, and will never meet. Social media - things like Twitter, Facebook, and YouTube allow you to broadcast yourself to the world.

An aspiring musician might make a video on their phone of them playing an original song in their basement or bedroom. They upload that song to a place like YouTube and some of their friends and family might view it and share it with their wider circle.

A few weeks later it might have been viewed in all fifty states. A few months later, if the song was popular enough, it might make its way outside of the country. Some musicians have been discovered by record labels this way and offered recording contracts. What begins as a song recorded in a basement in Roscommon Michigan could become a hit in Tokyo Japan if the conditions are right.

The movement of people, goods, and ideas is constantly taking place. You'll learn more about how people, goods, and ideas move in later chapters of this book.

Use the infographic at this website to research a method of communication through the ages. Explain how the method you

chose connects/connected people during that time period.

Describe how a “tweet” on Twitter, or a Facebook status update represents movement of an idea.

Return to your interactive journal and describe three important things you have learned about movement in this chapter.

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?

Human/Environment Interaction in Latin America Introduction

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?



Image source: http://en.wikipedia.org/wiki/Latin_America#/media/File:Latin_America_%28orthographic_projection%29.svg

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

Interactive 3.1 More About Latin America



This video created by a teacher for his class gives an overview of Latin America and many of the things you'll study about in this section.

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.

Interactive 3.2 Rain Forest Threats



This short article from National Geographic will give you a little background information on an issue you might choose to study further in this chapter.

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.

Interactive 3.3 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

Physical Geography - Mexico

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?

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

Interactive 3.4 Google Maps - Mexico



Use this interactive widget to zoom in on and see the physical characteristics of Mexico.



Image source: <http://www.earthchronicle.com/ECv1/Atlas/Images/AmericaSRTM-CentralLarge-picasa.jpg>

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.

Interactive 3.5

Earthquakes in Mexico



Find the most recent data for earthquakes in Mexico using this website.

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

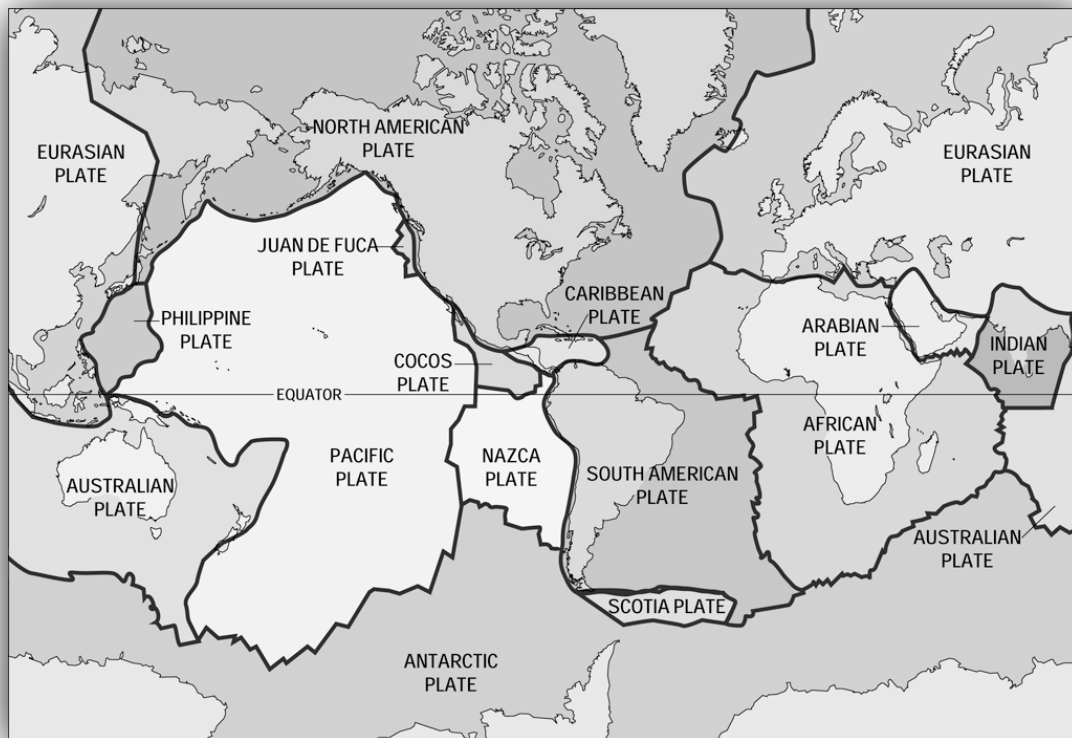


Image source: http://upload.wikimedia.org/wikipedia/commons/a/ad/World_tectonic_plate_map_large.png

Section 3

Physical Geography - Central 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?

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.

Interactive 3.6 Google Maps - Central America



Use this interactive widget to zoom in on and see the physical characteristics of Central America.

Using the Google Map and the map on this page, describe Central America's location in the world.



Image source: http://upload.wikimedia.org/wikipedia/commons/9/94/CIA_map_of_Central_America.png



Image source: http://upload.wikimedia.org/wikipedia/commons/a/ae/Sierra_Madre_Occidental.jpg

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?

Physical Geography - South 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?



Image source: http://upload.wikimedia.org/wikipedia/commons/5/51/South_America_laea_relief_location_map.jpg

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.



Image source: http://simple.wikipedia.org/wiki/Andes#/media/File:Andes_70.30345W_42.99203S.jpg

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.



Image source: http://commons.wikimedia.org/wiki/File:Romanceor_Altiplano_1.jpg

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.



Image source: Patagonia http://en.wikipedia.org/wiki/Santa_Cruz_Province,_Argentina#/media/File:Landschaft_von_Patagonien.jpg

River Basins



Image source: http://upload.wikimedia.org/wikipedia/commons/f/f6/Amazon_rainforest.jpg

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.

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.

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.

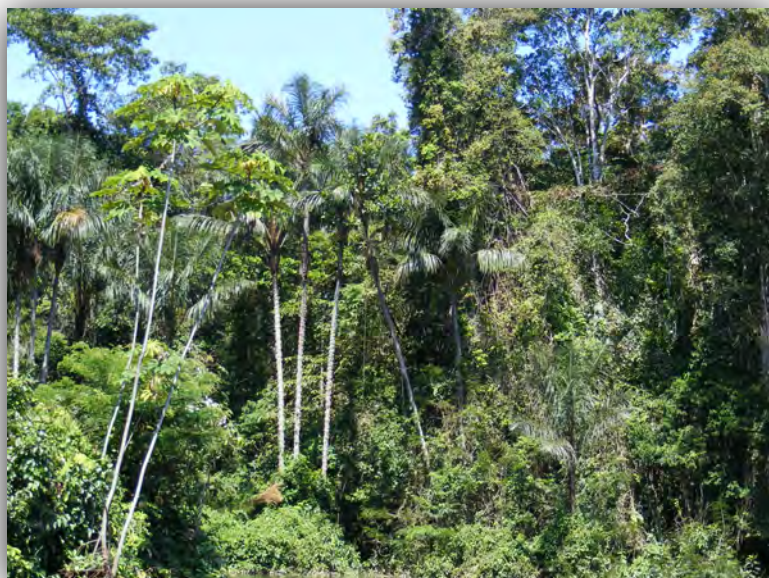


Image source: <http://upload.wikimedia.org/wikipedia/commons/6/62/>

Amazonian_rainforest.JPG

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?

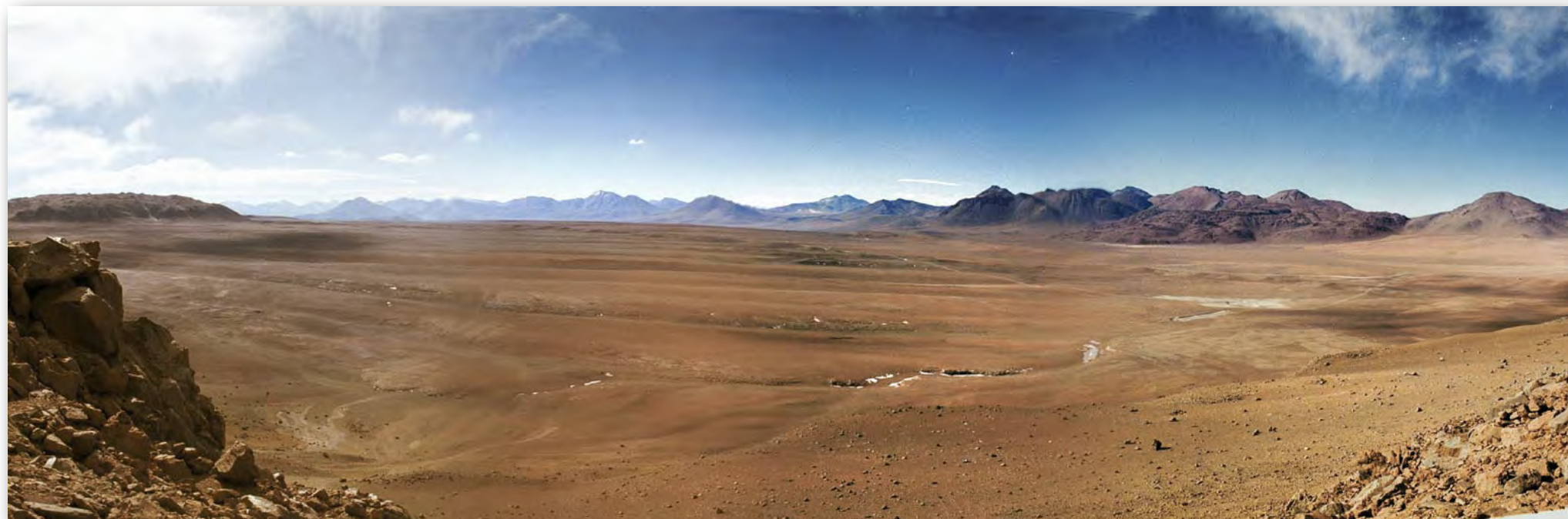


Image source: http://upload.wikimedia.org/wikipedia/commons/0/08/Birds_eye_view_of_the_Chajnantor_plateau_in_Chile's_Atacama_Desert.jpg



Section 5

Physical Geography - The Caribbean

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.

Interactive 3.9 Google Maps - The Caribbean



Use this interactive widget to zoom in on and see the physical characteristics of the Caribbean.



Image source: http://upload.wikimedia.org/wikipedia/commons/8/85/CIA_map_of_the_Caribbean.png

CIA_map_of_the_Caribbean.png

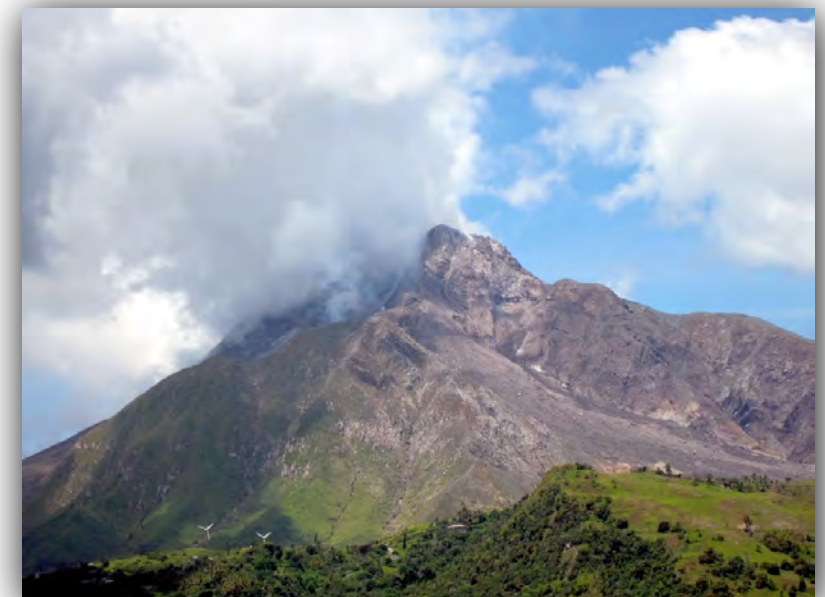


Image source: http://upload.wikimedia.org/wikipedia/commons/7/7b/57Soufriere_Hills_Volcano.jpg

Soufriere_Hills_Volcano.jpg

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



Photo credit: Brian Dufort

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.



Arikok National Park, Aruba

Image source: http://en.wikipedia.org/wiki/Arikok_National_Park#/media/File:Arikok_NP.jpg

History - Early Civilizations

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?

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.

Interactive 3.10 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

How are humans interacting with the environment when practicing agriculture?

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.



Map of Mesoamerica, showing locations of cities and historical sites Image source: <http://www.lib.uci.edu/about/publications/exhibits/meso/images/3.jpg>

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.

Interactive 3.11 Pyramids in Mesoamerica



Follow this link to view a slideshow of the pyramids of Mesoamerica:

Mayan Calendar



Image source: http://upload.wikimedia.org/wikipedia/commons/6/64/Mayan_Compass_1.jpg

it was most likely a combination of these events. Although the civilization collapsed, the Mayan people still can be found living 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.

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

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.

Interactive 3.13 Tenochtitlan



Learn more about Tenochtitlan at this academic website.

In what ways did the Aztecs interact with the environment?

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

Interactive 3.14 The Inca



Watch this video (requires internet connection) for an explanation of how the Inca built their empire. What examples of human-environment interaction do you see?

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,



Image source: <http://upload.wikimedia.org/wikipedia/commons/7/71/Pisac006.jpg>

beans and peanuts. The potato was especially important as it could easily grow in the poor mountain soil and survive the cold temperatures.



Image source: http://upload.wikimedia.org/wikipedia/commons/e/eb/Machu_Picchu,_Peru.jpg

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?

Interactive 3.15 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

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 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.



Giant Parade Float, Carnival, Brazil http://mrfoster.blog.hu/2015/02/22/a_leggyonyorubb_jelmezek_amiket_el_tud_kepzelni

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.



Image source: http://commons.wikimedia.org/wiki/File:Gaucho_in_action.jpg

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



Image source: http://upload.wikimedia.org/wikipedia/commons/d/d8/Map_of_Central_America.png



Image source: http://upload.wikimedia.org/wikipedia/commons/9/98/Caribbean_general_map.png



Image source: http://upload.wikimedia.org/wikipedia/commons/7/70/%22Political_South_America

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 island 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.

Interactive 3.16 Lake Texcoco Area Today



Compare this map to the one on the left. What do you think caused the differences?

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

Interactive 3.17 Panama



Learn more about Panama at this website.

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.

Interactive 3.18 Panama Canal



Learn more about the construction of the Panama Canal with this video.

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 3.19 Rainforests in Brazil



Learn more about the Brazilian rainforests [here](#).

Interactive 3.20

Deforestation Web-quest



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

Interactive 3.21 Enter Amazonia



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

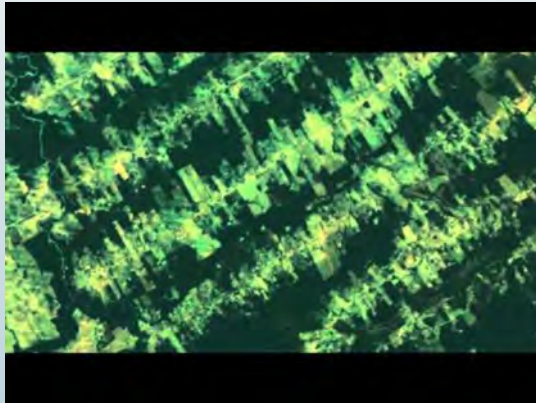
- "Enter Amazonia" for general information.
- "Water worlds" for information about the waters and water animals
- "Life on Land" for land animals
- "The Big Top" for animals in trees
- "Powerful Plants" to find out what plants are there and how the plants are used
- "Sacred Ground" to learn about problems in the rainforest.

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 3.22

Destruction of the Rainforest



Check out this short “Before & “After” video highlighting the destruction of 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.

Interactive 3.23 Interactive Journal



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North Africa and the Middle East

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Section 1

Introduction and Physical Geography

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Movement

How do we move from place to place?
How do ideas move from place to place?
How do products move from place to place?



Regions

What region do we live in?
What are a region's characteristics?
What type of region is it?
What makes a region?



Human/Environment Interaction

How have we adapted to or changed our landscape?



Location

Where are we?
Where is a place?



Place

What kind of place is it?
What is it like there?

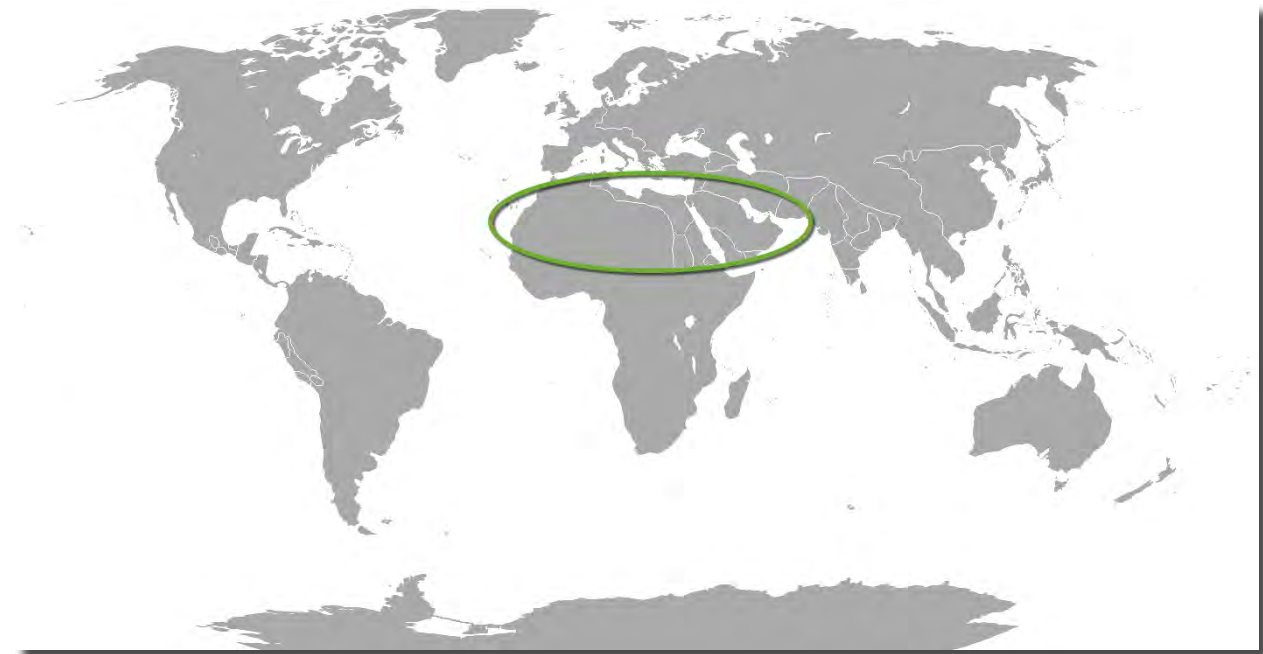


Image source: <https://upload.wikimedia.org/wikipedia/commons/d/d0/BlankMap-World-1ce.png>

On the map above, the regions circled in green are North Africa and the Middle East. Using only this map, try and answer one of the questions geographers asked when studying place:

Where is it located?

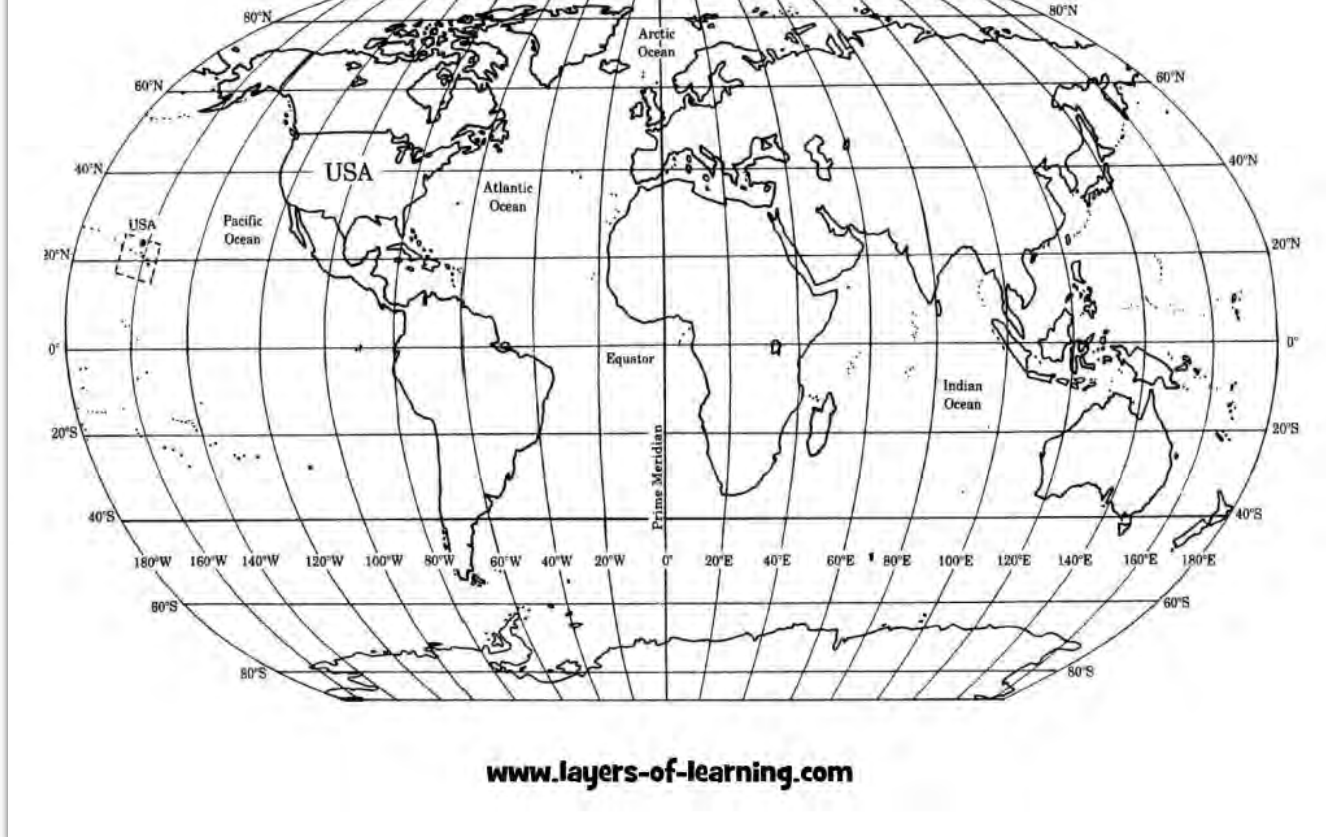


Image source: http://190152612307854813.weebly.com/uploads/1/2/6/8/12683649/9446804_orig.jpg

The map above contains lines of latitude and longitude which were discussed in the introduction. These imaginary lines run up and down, as well as across the world to give geographers the ability to assign coordinates which describe where a place is. Use the map above (Hint: You can click on it to make it bigger) to try and answer the same question you were asked before.

Where is it located?

In this chapter we'll explore another theme of geography: Location. In order to study a place you have to know where it is.

This allows you to then look at what is around it, and what is connected to it.

The region of North Africa and the Middle East lies at the continental crossroads of Asia, Africa and Europe. At this intersection of the world, all three continents meet here at the Mediterranean Sea. The region extends from the eastern border of Pakistan to the Atlantic coast of Morocco in the west. The region includes many diverse landscapes. It contains rugged mountains, vast deserts, spacious plains and is surrounded by numerous seas. In this unit, you will learn how geography impacts the way people live. You will also discover how culture impacts a person's perspective.

Think about the following question:

Does where you live affect your viewpoint on the areas where others live?

When looking at this region, there are some different viewpoints on an appropriate name. The Middle East has been known by many different names throughout history, all depending on the viewpoint of the people referring to the area. Today Southwest Asia and Middle East are used interchangeably. With both terms

being used to describe the same region, it can be confusing at time as to which is appropriate. Geographically, Southwest Asia contains all of the countries of the Middle East as well as Pakistan and Afghanistan, Using the map on the previous page, what countries seem to make up the Middle East?

The use of the term “the Middle East” has been criticized recently as a primarily **Eurocentric** view. Having a Eurocentric view means that the worldview is centered on Western Civilization. According to the Associated Press, the term “The Middle East” would refer to the countries of the western part of the region and Near East referred to the countries of the east, but now they are interchangeable. With all this in mind, there are a number of different ways to refer to the region, however the current accepted terms are Southwest Asia and the Middle East. For simplicity, the term “Middle East” will be used in this chapter.

North Africa and The Middle East are two regions often grouped together because they have many things in common. The region is almost entirely composed of desert. In the region, Islam is the dominant religion and most people speak the Arabic language. These important factors bring the two different areas into one region. With all these things in common, there are many differences among the people.

- Christianity and Judaism are major religions in the area

- There are a number of different ethnic groups in the area. One example are the Kurds who live in parts of Iran, Iraq, Syria and Turkey. The Persians are the predominant ethnic group in Iran, connected by ethnic background and language.

As build your knowledge of North Africa and the Middle East, keep these questions in mind:

“How does where you live impact how you live?”

“How does culture impact a person’s perspective?”

Interactive 4.1 World Bank - The Middle East



The region of North Africa and the Middle East is a large, diverse region. There are many different geographic and human characteristics that make up the region. The varied landscape has influenced the way people live their lives.

North Africa and the Middle East have rich cultures and a history reaching far into the past. As you work through this section, you will look at the impact religion, government, and lifestyle play in how a person's perspective is shaped.

The region of North Africa and the Middle East covers almost 6.6 million square miles (17 million sq. km) in area, more than twice the size of the continental United States. North Africa consists of the countries of Morocco, Algeria, Tunisia, Libya and Egypt. The Middle East is made up of Israel, Jordan, Lebanon, Syria, Turkey, Iraq, Iran, Saudi Arabia, Yemen, Oman, United Arab Emirates, Qatar, Kuwait, Afghanistan and Pakistan.

The Middle East and North Africa have long been linked together. For centuries camel caravans have crossed the region taking goods and ideas back and forth. This region became a crossroads for trade, connecting Africa, Europe, and Asia. Today trade still makes a lasting impact, with oil being the dominate good instead of the spices and silks of centuries ago.



Image source: https://en.wikipedia.org/wiki/Trans-Saharan_trade#mediaviewer/File:Caravane_hoggar1.jpg

The rich history of the people in the region extends far beyond economics. The Middle East has long been known as the "cradle of civilization." This is where farming began. This is where the first cities developed and this region is also the birthplace of three major world religions.

Use this link to examine the area. Look at both the human and physical characteristics of the region. What are some of the things you observe? Zoom into the area, to some of the countries. Explore some of the pictures that show up at the bottom.

Economic Activity

Natural resources define the economic activity of North Africa and the Middle East. Petroleum, or oil, is the most important resource to the region due to the world's demand for it and the region having so much of it. Another major resource is water, which, in contrast to oil, is important due to the lack of fresh water in the region.

Interactive 4.2 Google Maps - North Africa and the Middle East



Use this interactive widget to learn more about the regions.

Fossil fuels are in high demand worldwide. Due to the large demand for oil, a **fossil fuel**, many countries in the region have grown very rich meeting the world's growing reliance. North Africa and the Middle East have the largest known oil deposits in the world. Oil is refined down and used in many different products. Gas is one product that comes from oil and is important since it is the fuel used by most cars, trucks, planes and ships worldwide.

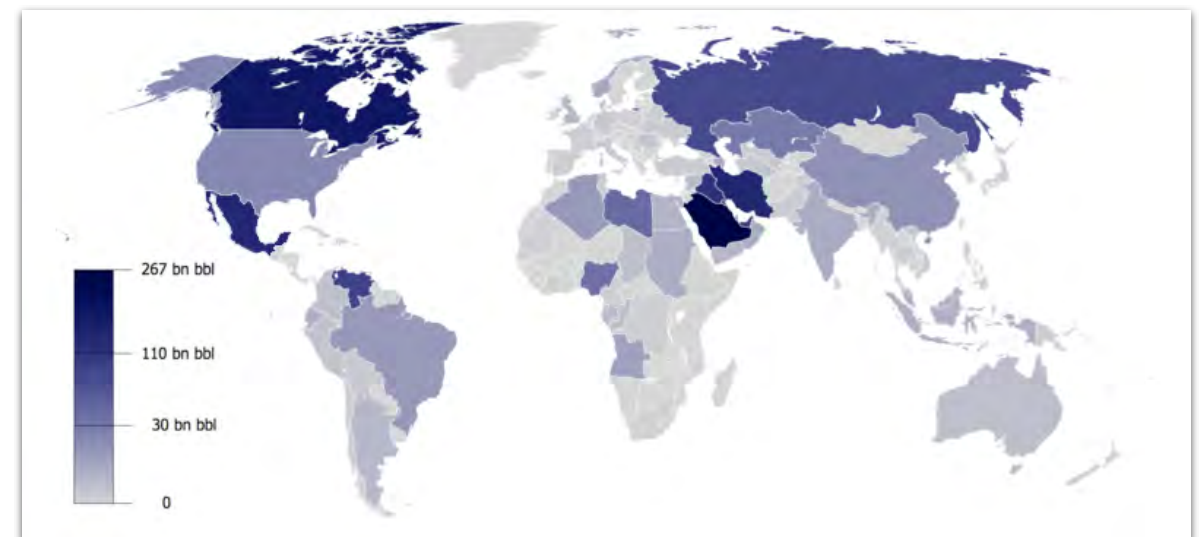


Image source: https://upload.wikimedia.org/wikipedia/commons/f/f0/Oil_Reserves_Updated.png

Describe where oil is located in North Africa and in the Middle East.

The lack of water limits how much agriculture areas are able to support. Very few areas are able to have commercial farming or livestock. In most areas there is just enough water for **subsistence farming** and nomadic herding. Small areas of commercial farming produce olives. Wheat and fruit can be found along the Mediterranean coast. Nomadic herders move cattle from place to place in search of both food and water to feed their animals. Families who rely on subsistence farming live on small plots of land and will raise just enough food to feed their family. The people of the region have spent centuries learning how to adapt to the challenges of surviving in this dry region. North Africa is one of five subregions of Africa. The world's largest desert, The Sahara, is the main physical feature in the area.

Physical Features

The Sahara desert is a combination of large sand dunes and rocky terrain. As you travel the region small areas of fertile plains exist around the few rivers and the occasional oasis, giving the region its only sources of fresh water. The Nile, the longest river in Africa, runs through this region, emptying into the Mediterranean Sea. To the north, the Atlas Mountains stretch across the region.

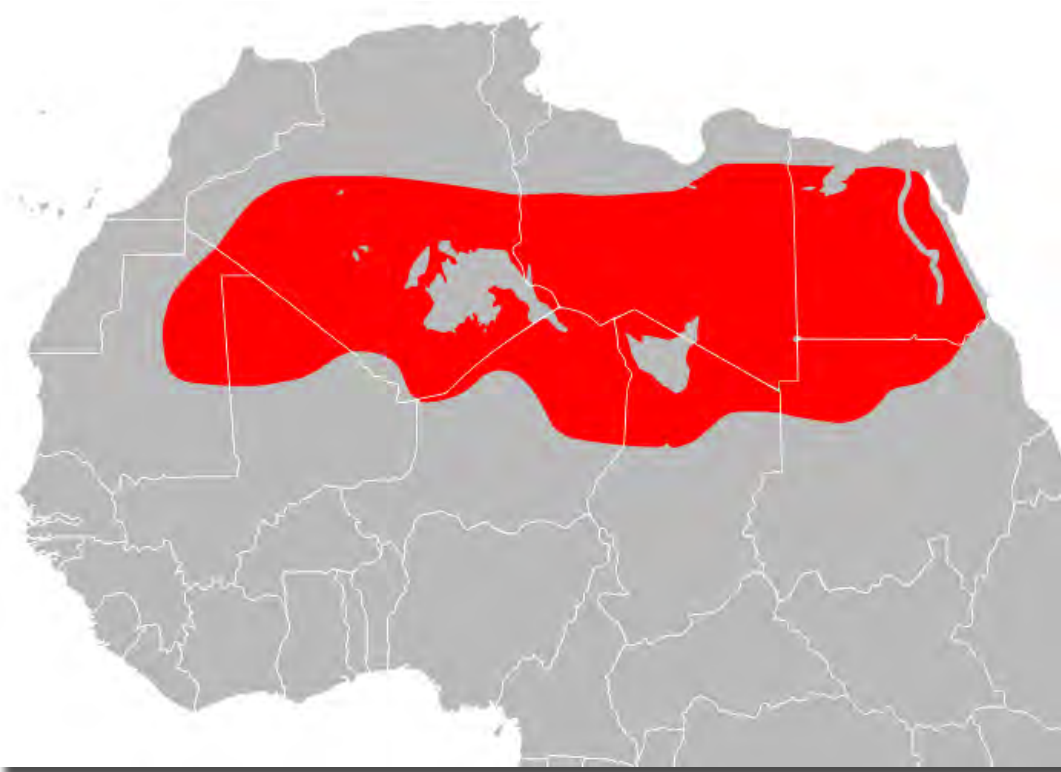


Image source: http://commons.wikimedia.org/wiki/File:Sahara_ecoregion.svg



Image source: <https://www.flickr.com/photos/babeltravel/2762316959/in/photostream/>

The physical landscape of the Middle East is defined by great differences. The region has some of the world's highest mountains to the east and the world's driest areas in the deserts covering much of the region. The region also boasts a number of bodies of water, both fresh and salt water. The Tigris and Euphrates rivers come together in the area once known as Mesopotamia to create one of the most fertile river valleys in the world.



Image source: http://commons.wikimedia.org/wiki/File:Mesopotamia_geographic.png

With a vast network of seas and gulfs, in addition to abundant natural resources, this region boasts one of the largest shipping networks in

the world. In the south is the world's largest peninsula, the Arabian Peninsula, which covers more than a million square miles.

To the north, the Anatolia Plateau covers much of the rugged landscape of modern day Turkey.

Climate

Despite the many seas and rivers in the area, North Africa and the Middle East are regions of mostly arid and semiarid climate zones. An area with an arid climate receives less than 10 inches

Critical Thinking Skill:

What other regions of the world have a climate similar to North Africa and the Middle East?

Why would these other regions have a similar climate?

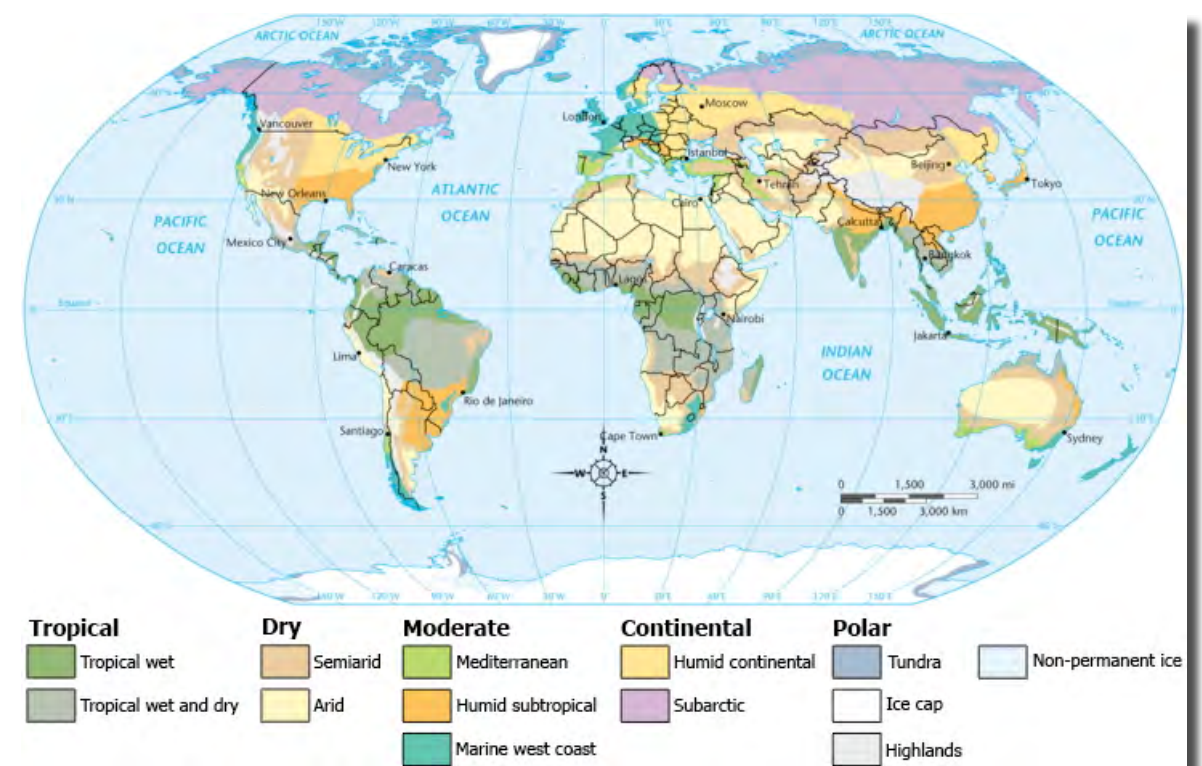
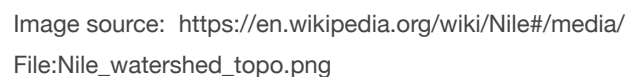


Image source: <http://upload.wikimedia.org/wikipedia/commons/c/c2/ClimateMapWorld.png>

Along the coastal areas, the climate is more moderate. Much of the area enjoys a Mediterranean climate. Here summers are warm with little precipitation and winters are mild and wet. In other areas of the region, the climate can vary drastically due to changes in elevation. Generally, in the mountain areas, as the elevation goes up the temperatures drop.



The vegetation of the region is very limited due to the arid and semiarid climates. Much of the region is covered by desert scrub. Desert scrub is made up of small trees and shrubs that can survive in a region where water is scarce. Other vegetation zones exist depending mainly on the temperature and rainfall of an area. The river valleys are covered with mixed forest vegetation. In these areas, both coniferous and deciduous trees grow. In the Nile River Valley you will find the region's only area of broadleaf evergreen forest. Some small areas of temperate grassland appear in the cooler climate found in the highland area of Turkey. Finally, along the coast of the Mediterranean Sea, you will find chaparral. This area of small trees and bushes thrives in the warm Mediterranean climate.

Section 2

History and Religion

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Interactive 4.3 The Spread of Religion



View this animated timeline depicting the spread of the five world religions.

North Africa and the Middle East is a large, diverse region. There are many different geographic and human characteristics that make up the region. The varied landscape has influenced the way people live their lives.

As you work through this section, you will look at the impact religion, government, and lifestyle all play in how a person's perspective is shaped.

History and Religion- How does culture impact a persons perspective?

The civilizations of Mesopotamia and Egypt had a huge impact on later civilizations. The Middle East and North Africa is known as “the cradle of civilization.” This is where agriculture (farming) first began. The first cities developed here and the region is also the birthplace of three of the worlds major religions. Around 5,000 years ago, two civilizations developed in the region. In North Africa, Egypt grew along the banks of the Nile River. To the east, Mesopotamia, developed on a fertile plain located between the Tigris and Euphrates Rivers.

Ancient Egypt

Around 5,000 years ago, two civilizations developed in this region. In North Africa, Egypt grew along the banks of the Nile River. To the east, Mesopotamia developed on a fertile plain located between the Tigris and Euphrates Rivers.

These civilizations had a huge impact on later civilizations. This is why the region has been called ‘the cradle of civilization.’ This is where agriculture, or farming, was invented and where the first cities developed. The region was also the birthplace of three of the world’s major religions.

Religion was very important in Egyptian society. The belief system was polytheistic. Polytheism is the worship of or belief in many gods or deities. All levels of Egyptian society were influenced by the beliefs of the Egyptian people. Egypt was a **theocracy**, a form of government where a religious leader or leaders rule. Egyptian rulers were called pharaohs and the Egyptians believed they were gods as well as rulers. The rest of society was broken down into many different levels. This complex social structure was based on



Image source: http://commons.wikimedia.org/wiki/File:Map_of_fertile_crescent.svg

the position people held in society. At the top were the rulers and government officials, in the middle were business and craftspeople, and at the bottom were the farmers and slaves.

Ancient Mesopotamia

Around 4000 B.C.E., people began to settle and farm the area along the Tigris and Euphrates Rivers. This area, also known as the Fertile Crescent, is an arch shaped area of fertile land that stretches from the Persian Gulf to the Mediterranean sea. Very similar to Ancient Egypt, the people of Mesopotamia relied on yearly floods to provide them with fertile soil and fresh water for **irrigation**. To help control the flooding, the people developed a complex system of ditches, canals and dams. This also provided water for irrigation of the farms..

About 1000 years later the small farming villages began to develop into larger cities in the area of Sumer. These large cities included the main city, normally surrounded by tall walls, and the

farmland around it. As these Sumerian cities grew, each developed their own form of government and came to be called city-states. Each city-state also included a center area that had a large temple dedicated to the god of that city. Just like in Egypt, people in Mesopotamia practiced a polytheistic religion.

Critical Thinking:

Explain how you think people in Ancient Egypt and Mesopotamia felt about the floods. Was the effect positive or negative?

Three World Religions

Is there a church, synagogue or a mosque in your area? These three places of worship represent three of the world's major monotheistic religions: Judaism, Christianity, and Islam. All three religions were "born" in the region and continue to claim portions of this region as holy land. While you will learn more about these religions in later grades, a brief history is necessary to understand this region of the world.

History of Religion

Judaism

Judaism is the oldest of the three religions. Judaism originated in Israel from Israelites or Hebrews also known as Jews. Today, Israel is still the center of the Jewish religion, but many believers are spread worldwide.

Jewish history and religion is found in their holy book, the Torah, or Hebrew Bible. In the first four books of the Torah, Judaism was founded by a man named Abraham. Around 1800 B.C.E God told Abraham to leave his home along the Euphrates River and move his family to the land of Israel. The Torah states that God made a covenant or agreement with Abraham. If he moved to the land of Canaan (Israel), he and his family would be blessed. The descendants of Abraham, known as Israelites today, believed they would continue to be blessed as long as they followed God's laws.

The Jewish people believe the most important laws were given to a prophet, or messenger of God, named Moses. According to the Torah, Moses led the Hebrews out of slavery in Egypt. After escaping slavery, the Hebrew people endured the long journey



Image source: http://vi.wikipedia.org/wiki/Do_Th%C3%A1i_gi%C3%A1o

back to the promised land. Along the way Moses received God's laws, the most important being the Ten Commandments. These laws were very different from others of the time because they were based on how the people should worship God.

Around 1000 B.C.E. the kingdom of Israel was created in the area of present-day Israel by King David.

Interactive 4.4 Judaism Overview



Learn a little more about Judaism through this YouTube video (requires internet connectivity)

The capital city of Jerusalem was established and a temple built. Later on the kingdom split into two states- Israel and Judah. In the coming centuries, the people of Israel would be conquered by outside invaders and forced to leave their homeland. This scattering of the Jews is known as the Jewish Diaspora.

Christianity

Christianity, another monotheistic religion, began about 2,000 years ago with a Jew named Jesus. About 30 C.E. Jesus began preaching in the present day region of Israel. The life and teachings of Jesus are presented in the four Gospels, the first four books of the New Testament. The New Testament is part of the Bible, the Christian holy book. Jesus taught that God loved all people, even those who had sinned. He explained that if people

placed their trust in God, their sins would be forgiven. Jesus' followers declared he was the son of God and savior of all people.

Many people viewed Jesus as a savior sent by God to save them. The large following that he was building worried many of the Roman leaders in Israel. Jesus was convicted of treason under Roman law and sentenced to be crucified. According to the Gospels, Jesus rose from the dead and appeared to his followers.



Image source: <http://commons.wikimedia.org/wiki/File:ChristianitySymbolWhite.PNG>

Over time, Jesus' followers spread his message all throughout the Mediterranean region. Churches formed in communities large and small. Eventually the Gospels, accounts of Jesus' life, and other writings from early Christians came together to form the Christian Bible. Christianity spread all over Europe and became the dominate religion there and eventually around the world. It is presently the world's largest religion with about 2 billion followers.



Islam

Islam is the third monotheistic religion developed in the region in the 600s CE in present day Saudi Arabia. Muslims are followers of Islam. Muslims believe a man named Muhammad was the last and greatest prophet of Islam. He followed the prophets Abraham, Moses, and Jesus.

Muhammad, born around 570 C.E., was a merchant living in the trading city of Mecca. According to the Quran, the holy book of Islam, Muhammad was given messages about God from an angel. The angel told him that God wanted him to preach to the people, telling them that there is only one God, Allah. In his messages, Muhammad was also sent to tell people that all whom believed in Allah were equal in his sight.

After the death of Muhammad in 632 C.E., a group of religious leaders known as caliphs ruled the Muslim community. For the next few centuries, Islam spread into Asia, North Africa, and parts of Europe. Muslim control of trade in these areas helped their cities grow. These cities became centers for trade, learning and government in the Muslim world. Muslim scholars made many important contributions to math, chemistry and medicine.



Image source: http://commons.wikimedia.org/wiki/File:PikiWiki_Israel_13177_Christianity_and_Islam.jpg

How does where you live impact how you live? Living in the Middle East exposes people to three of the world's major religions. How do you think these religions influence the way people your age live in the Middle East?

Interactive 4.5 Comparative Religions



Complete this handout with your knowledge from this section and any additional research you need.

Cultures and Government - North Africa

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Cultures and Lifestyles

Culture is the way of life shared by a group of people. It includes their ideas, traditions, values and beliefs. All these areas are influenced by the viewpoints, rules and institutions found among the people. There are a number of traits that can describe a people's culture. This section will focus on six: art, language, food, government, religion, and ethnic background. Why does this matter? The region of

North Africa and the Middle East has served as the crossroads for the continents of Asia, Africa, and Europe. This has resulted in a region that has been home to many different groups and cultures.

The people of North Africa have a long and rich past. As the birthplace of one of the world's earliest civilizations, Ancient Egypt, the region has a rich cultural heritage. Many of the traditions and cultures of some of the ethnic groups have changed and adapted over time. Modernization and urbanization have had an impact on the way of life for the people of the region. Despite this, many still



Image source: http://commons.wikimedia.org/wiki/File:A_cameleer_with_his_traditionally_decorated_camel._Cairo,_Egypt,_North_Africa.jpg

hold on to their traditional ways.

Ethnic Background

The people of North Africa are a mix of indigenous and Arab cultures with a strong European influence. The main indigenous people, the Berbers, existed long before the Arab invasions. Of the some 15 million Berbers who occupy the area, most are farmers or pastoral nomads. These people mostly live in the Atlas Mountains and areas of the Sahara desert.

The majority of people in the region are Arabs. United by language, the Arabic-speaking people migrated to the region from the Arabian Peninsula in the 600s C.E. Bedouin herders can still be found raising animals in the desert where water can be found to support vegetation.

Government

Early on, the people of North Africa were hunter-gatherers that lived in small groups. As time passed the Egyptian civilization developed in the Nile River Valley. This civilization had a theocracy, government based in religious belief. The pharaoh was not only the head of government but seen as a god as well. As centuries passed, different groups fought for control of the region. Finally in the 1800s a period of European colonial rule took control. The European states took control of the governments and

separated the area into geometric boundaries, separating the land using straight lines. These boundaries were drawn by the colonial powers and did not take into account natural and cultural features that existed in the area. This created conflict among the new countries. In the mid-1900s nationalism began to take hold and many North African countries were able to gain their independence.

Today many different types of governments exist. European colonization still has a great impact on the governments of the region. Stability is difficult to obtain. Civil wars have been common. Some countries are beginning to develop democracy and constitutional monarchies that look to create some equality and stability for the people in North Africa.



Language, Food and Art

How does where you live impact things like your language, food and the art or music you enjoy? In a region as culturally diverse as North Africa, it has a large impact. Due to the high degree of cultural diversity, the region's food, language and arts have developed a flavor of their own. The diet of people living in the region is based on staple foods that can be grown and raised in the harsh desert environment. Food like seafood, goat, lamb, beef, dates, almonds, olives, and other fruits and vegetables make up the staple diet of the people. Highly influenced by Muslim culture, most dishes served in the region follow Islamic Law for food and meal preparation.



The history and cultures have also had a large impact on the languages spoken in North Africa. Today most people speak Arabic. This is a result of the dominant influence of the Islamic religion on the area and the conquering of the area by the Arab Islamic armies in the 600s C.E. In some areas the traditional Berber

language still is spoken. With the continued growth of the world community, in many of the larger cities English is spoken.

History and the world community have had a strong influence on art and music. Much of the art that comes from the region has a strong mystical feel to it. Berber and Islamic culture heavily influence the style of the region's art. Traditional symbols and signs are used to draw connections to pre-Islamic times. Music is influenced much the same way. Many of the original peoples of the area, like the Berbers, enjoy traditional music styles. Much of the music is Muslim influenced. Today, popular music contains aspects of these traditional roots as well as popular music that has been imported.

Interactive 4.6 Music of Morocco



Learn more about the Music of Morocco at this Interactive Website

Image source: <http://upload.wikimedia.org/wikipedia/commons/3/37/IlkhanateSilkCircular.jpg>

Cultures and Government - The Middle East

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Very much like North Africa, the Middle East has a rich history and heritage. As the birthplace of civilization and three major world religions, the region has had a number of traditional, religious and ancient influences on the cultures in the region. Modernization and urbanization have also had an impact on the way of life for the people of this region. Despite this, many still hold on to their traditional ways.



Ethnic Background

Almost 350 million people live in the Middle East today, more than the current population of the United States. There is a variety of backgrounds as a result of migration from neighboring areas. This is a result of a long history of migration of people into the region from neighboring areas.

Arabs make up the largest ethnic group in the region. The term refers to people who originally inhabited the Arabian Peninsula, but today the term connects the people who speak the Arabic language. A number of other ethnic groups make up the region. In Israel there are the Palestinians and Jews, in Iran the Persians, and

the Kurds spread throughout Iraq, Iran, Syria and Turkey.

Government

Early on, the people of the Middle East were hunter-gatherers who lived in small groups. As time passed and civilization developed in Mesopotamia, so did government. City-states developed within the area. Many of these city-states had monarchies and theocracies both supported by their religious beliefs. As centuries past, different groups fought for control of the region.

The Ottoman Empire, centered in present day Turkey, held political control from the early 1500s until after World War I. Following the empire's collapse, portions of the region gained independence, however much of the region was placed under the colonial control of a few European countries. By the 1970s, many of the countries were able to gain their independence. These new governments varied in style from monarchies to dictatorships. Many would continue to see periods of unrest and war that has extended into the present day. Since the 1990s many, but not all, countries have slowly moved towards democracy. This push towards a democratic system of government has been driven by the peoples' desire for more participation and freedom in the political life of the countries.

Language and Food

Most people in the region speak Arabic. However, there are many areas that speak Turkish, Farsi and other local languages and dialects. Many areas speak unique dialects through the combination of other languages spoken in the region. For example, some people in Lebanon speak a blend of English and French mixed in with the local Arabic dialect.

Middle Eastern food's unique flavors have been influenced by diverse populations throughout the region. Middle Eastern cuisine is as mixed and diverse as the people who make up the region. Even with this diversity, the food holds some common aspects across the region. Sharing similar characteristics and staple foods, much of the cuisine is based on food like olives, olive oil, pita bread, honey, dates, chickpeas, mint and parsley. Staple meats include lamb and some beef. All foods share the same characteristic of being able to grow in the fertile valleys of the Tigris and Euphrates rivers.

Global Connections

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, interconnected?
2. Does where you live affect your viewpoint on the areas where others live?
3. How does culture impact a person's perspective?

Interactive 4.7 Dubai - Then and Now



Learn a little more about Dubai at this website.

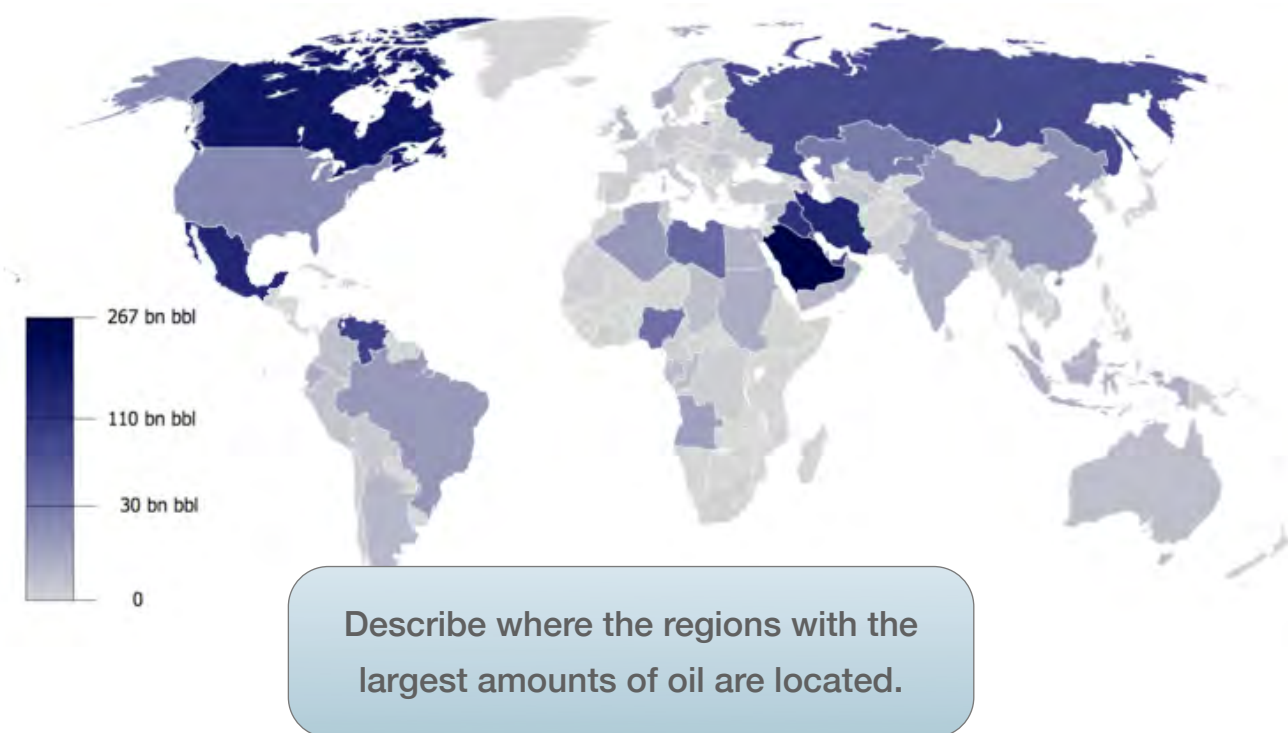
Global Connections-"How does having a valuable natural resource impacted the people of the region?"

You've never known life without a Playstation (1994), Wifi (1999), or even the iPhone (2007). Can you imagine what people did prior to these inventions? In a short amount of time much can change the way people live. Other parts of the world such as the Middle East have radically changed as well. Take Dubai for example, by clicking on the Interactive 4.7 link you'll see what fifteen short years did to that city. What brought about such rapid and dramatic change to this jewel of the Middle East?

Dubai is one of a collection of seven states that make up the United Arab Emirates. Not that long ago this was a small town where nomads raised cattle in the nearby desert oasis. Today it is a growing city with all the modern amenities. What could cause such a dramatic change in this small Middle Eastern state?

The Middle East sits on the largest oil reserve in the world. It is estimated that the countries of the Middle East control approximately half of the entire oil reserves in the world. Along with the abundance of oil, large natural gas reserves give the

region a wealth of the natural resources that are seen nowhere else in the world. World demand for oil has been growing year after year. As mentioned earlier, crude oil is refined down into many different products. As demand for these products has gone up, the countries who control the oil have become very wealthy. In the next chapter you are going to learn how having such a valuable resource has affected the way people in the Middle East live.



Oil: So whats the big deal?

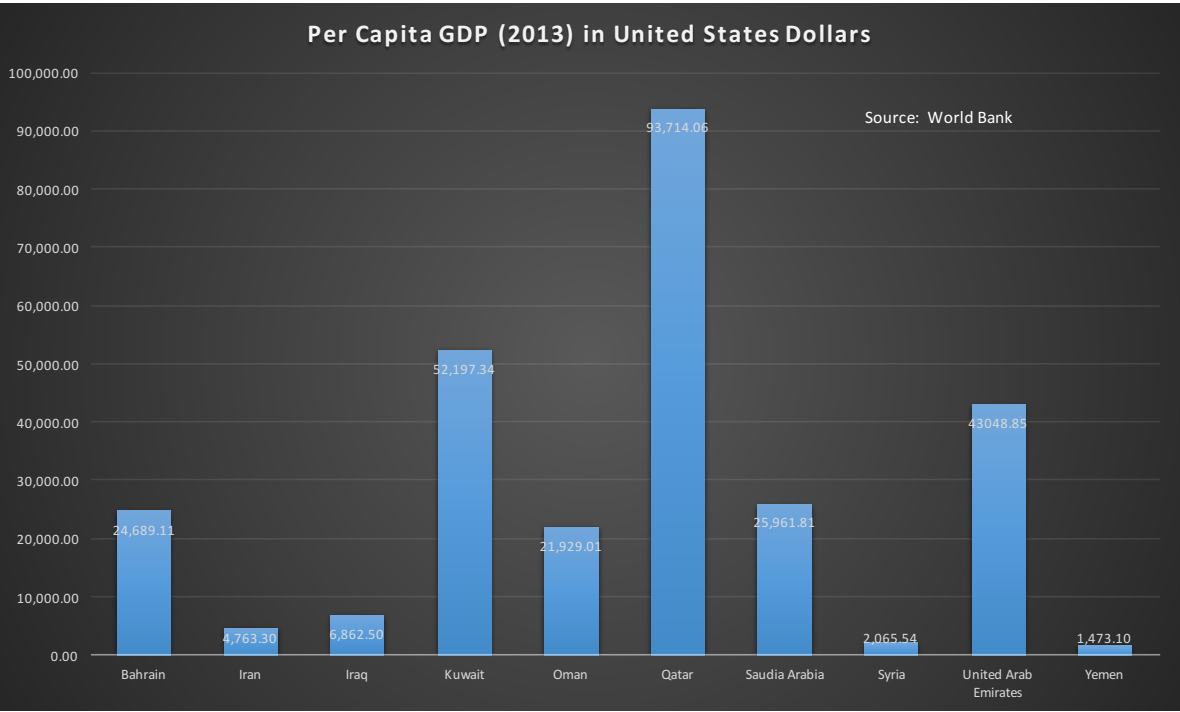
The Middle East is not the most welcoming region of the world. Much of land is hot and dry. The area is characterized by large deserts, rugged mountains and plateaus. However, beneath this formidable exterior is a vast reserve of oil and natural gas. More

than half the world's reserves of crude oil or petroleum is found under the lands of the Middle East. Worldwide demand for oil and natural gas remains high. These two factors have given countries of the Middle East a wealth not seen elsewhere in the world.

Most countries have become very dependent on fuels produced from crude oil to meet their energy demands. Many forms of transportation run on fuels refined from oil. Power plants burn oil to create electricity to power the homes and electronics we use daily. Oil is also used in many products such as medicines, plastics, cosmetics and other goods. As demand continues to grow the reserves will one day begin to shrink. Oil is a nonrenewable resource. There is a limited supply of it and it cannot be recreated. Once the supply is gone, we will have to turn our attention to renewable forms of energy to take its place.

Oil is not distributed equally throughout the world. It takes very special conditions for the earth to take plant and animal remains and change it into oil. Distribution of oil in the Middle East is uneven as well. Saudi Arabia is the region's largest country and has the most oil. On the other hand countries like Kuwait and the United Arab Emirates are much smaller in proportion to Saudi Arabia, but have almost have as much oil as their Middle Eastern neighbor. Other countries, like Bahrain and Syria, have some oil but it is far less than most of the region.

Oil Wealth



Oil has brought great wealth to the people and countries of the Middle East. The graph above shows the per capita **Gross Domestic Product** of 10 Middle Eastern countries. This data shows the comparison of how rich one country is to another. As you may observe, not all oil countries are the same and a country’s oil wealth is not divided evenly among the people. Some are very, very rich while others are extremely poor.

The oil wealth of many Middle Eastern countries has impacted the people in positive ways. In general the money from oil production has improved the lives of many of the people. Life expectancy has increased and the infant mortality rate has fallen. Both factors can be attributed to countries using their wealth to

improve the health care of the region. As seen in the changes in Dubai, both public and private wealth from oil has improved and expanded cities in the region.

How might having this valuable resource affect the people of the Middle East? Give two ways you think this resource will affect the region in the future.

Oil has not improved life for all people in the region. Oil has not ended poverty in the Middle East. Many countries, like Yemen, remain among the poorest countries in the world. A number of countries in the Middle East do not share the same amount of oil, in turn their oil wealth does not meet the needs of their poor population. Some countries have made a lot of money on oil but have not used that money to improve the lives of their people.



Image source: <http://commons.wikimedia.org/wiki/File:OPEC.svg>

Oil and the World

So, how does having this valuable resource affect the world? Many oil producing countries of the Middle East depend on oil sales as a major part of their country's economy. Due to this dependance, many countries have the goal of a steady oil supply. This allows countries to have a steady flow of money coming into their country.

To meet this goal, several countries have formed the Organization of the Petroleum Exporting Countries or OPEC. Currently OPEC has 12 member countries, six of the members are Middle Eastern countries: Iran, Iraq, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates. The other 6 non-Middle Eastern countries are

Algeria, Angola, Ecuador, Libya, Nigeria, and Venezuela. These member countries want to keep oil pricing steady, not too high not too low. To do this they control the production of oil. If too much oil is pumped, there will be less competition for it and the price it sells for will be too low. If there is too little produced, there will be more competition between buyers, forcing pricing to rise too high.

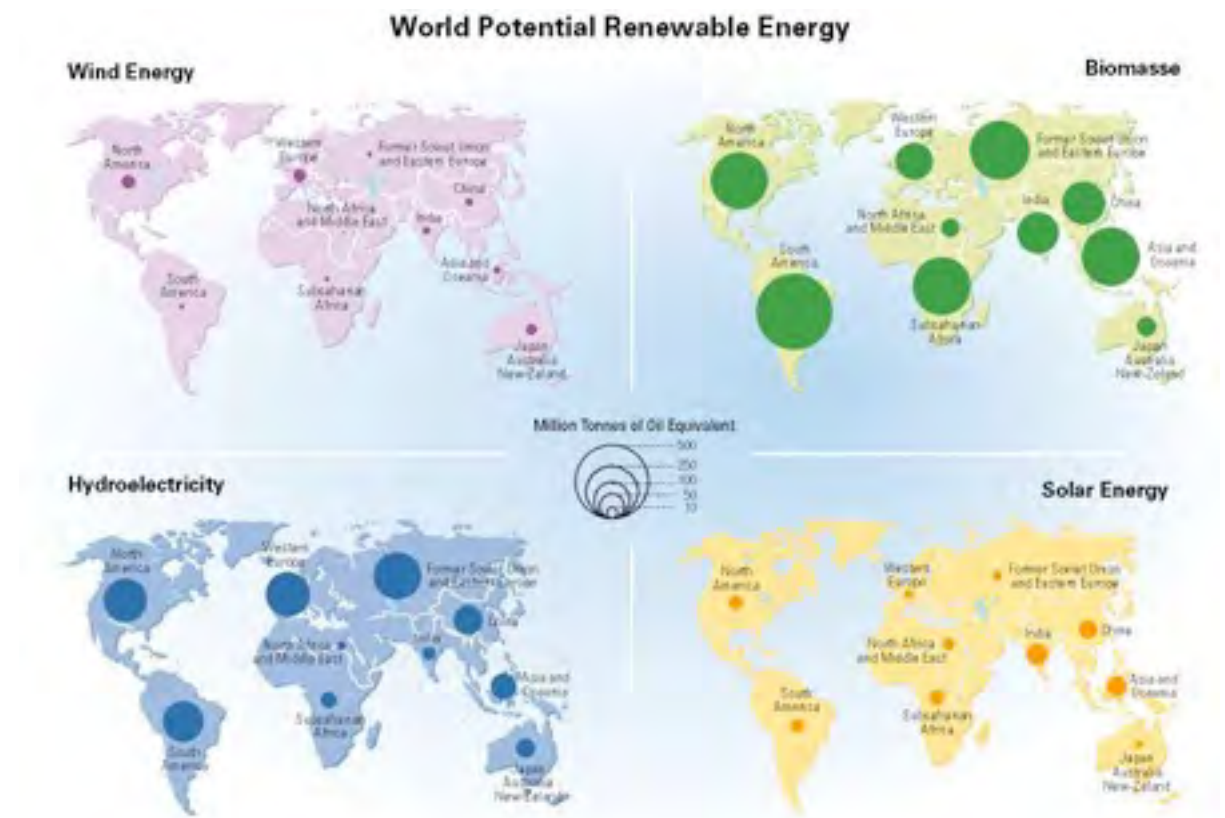


Image source: http://upload.wikimedia.org/wikipedia/commons/9/9a/Renewable_energy_potential.jpg

Despite all this power over oil production, there are some things that limit what OPEC is able to control. First, OPEC cannot control all of the oil sales in the world. Member countries control less than half the oil that is exported around the world. The rest comes from various non-OPEC countries. Another factor is that members do not always act as a group. Some members act independently and refuse to follow the decisions that OPEC makes about how much oil to produce or who to sell to.

The world's dependence on oil has been increasing year after year. Countries become more dependent on oil as they develop economically. Simple economics shows that as more people demand a product like oil, the price will continue to rise. As you have learned in this unit, oil is a nonrenewable resource. With more people demanding oil and oil products, the world has begun to look at new renewable energy resources. Examples include solar and wind

energy. As oil demand stays high and resources run out, more and more people will have to begin using alternative forms of energy.

Looking through the Eyes of the World Your interactive journey through geography: Record your thoughts to the essential questions in your journal.

Interactive 4.8 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

Sub-Saharan Africa

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa overcome the many challenges they face?

Introduction - Africa South of the Sahara

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa overcome the many challenges they face?

Movement

How do we move from place to place?
How do ideas move from place to place?
How do products move from place to place?



Regions

What region do we live in?
What are a region's characteristics?
What type of region is it?
What makes a region?



Human/Environment Interaction

How have we adapted to or changed our landscape?



Location

Where are we?
Where is a place?



Place

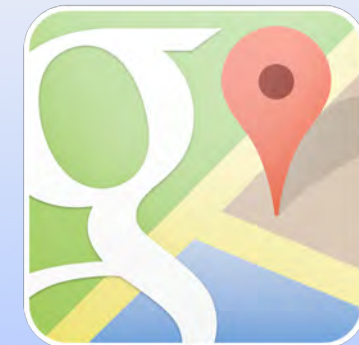
What kind of place is it?
What is it like there?



Where is it?

Point A: It is about 8,356 miles (13448 km) from Lansing, Michigan to Cape Town, South Africa.

Interactive 5.1 Trip to South Africa



Explore the route from Lansing Michigan to one of the Southern most tips of Africa.

Place - What is it like there?

In the introduction to this book you learned briefly about the five themes of geography, and previous chapters have covered the geographic themes of Movement (North America), Human/Environment Interaction (Latin America), and Location (North Africa and the Middle East). This chapter will help you begin to think more about the theme of “place.” Geographers define the study of place as the conditions at a location, or more simply, a study of what it’s like there. If you look back at the chapters on North America, Latin America, and North Africa and the Middle East you’ll notice in the sections on physical geography that this question has really been answered.

Introduction: Africa South of the Sahara

Africa is a large landmass, second only to Asia in size. The continent is a land of diverse physical features including high mountain peaks, great valleys, large deserts, great rivers and tropical rain forests. Sub-Saharan Africa is a region that geographically lies south of the Sahara Desert. Approximately 90% of the region lies within the Tropics Zone, giving the region a warm climate. In this unit, you will learn how the environment impacts the way people live. You will discover how people have adapted to living in this diverse landscape.



As you build your knowledge of Sub-Saharan Africa, keep these essential questions in mind:

- “How does history impact the culture of a region?”

Over time, the people of the region have had to face many challenges as a result of their history.

“How do the people of Sub-Saharan Africa overcome the many challenges they face?”

People of Africa South of the Sahara face many challenges such as surviving in dense tropical rainforests and living in the harsh desert. They deal with the change in governments, war, and the threat of starvation.

With an area about three times the size of the United States, Africa South of the Sahara accounts for almost one-fifth of the total land in the world. The land area totals 10.3 million square miles. It is not surprising that a region this large is made up of 54 countries.

Sub-Saharan Africa is a region comprised of many cultural groups. Some 2,000 different languages have been accounted

for in the region. Some, like Arabic and English, are used all over the region by many different cultures. Others, such as Hadza, are isolated to remote areas of the continent. Despite these extreme differences, Africans share a long, storied history.

The region is home to some of the oldest groups of people found. Scientists have found bones dating back to the earliest of times. With this evidence, many have called Africa the birthplace of the human race. These early peoples were hunter-gatherers, moving from place to place to find their food. Later on, they learned to farm and began raising animals and growing crops.

For centuries great African empires rose and fell in the region, as well as small kingdoms and city-states. Vast trade networks connected Sub-Saharan Africa with Europe and Asia. In the 1400s, European explorers looking for a sea route to India and China began to visit Africa. The Portuguese were the first to set up trade along both the west and east coasts of Africa. In the Mid to late 1800s European countries began to carve up Africa into colonies. By 1914 only Ethiopia and Liberia were independent nations.

Interactive 5.2 Countries in Sub Saharan Africa



This page from the Library of Congress provides a list of countries in Sub Saharan Africa. Choose one country from this list and use the Internet to do a little research on this country. In one paragraph, describe “What is it like there?” Share your findings with a classmate.



Image source: [http://commons.wikimedia.org/wiki/File:Flag_map_of_Colonial_Africa_\(1945\).png](http://commons.wikimedia.org/wiki/File:Flag_map_of_Colonial_Africa_(1945).png)

The age of African Independence began in the late 1950s. Ghana was the first to gain its independence from European rule. Over the next decade many African colonies were able to fight to gain their freedom from colonial rule. Unfortunately many were not prepared to self-govern. Since that time, many countries have found it difficult to establish strong, stable governments.

Section 2

Physical Geography

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa overcome the many challenges they face?



Image source: https://upload.wikimedia.org/wikipedia/commons/e/e7/Volta_lake_from_the_Saint_Barbara_Church.JPG

Physical Geography

Sub-Saharan Africa is a huge region in size and has a great diversity of physical features. Many geographers describe it as a land of plateaus. It also has large basins and coastal plains however. There are many mountain ranges in the region. Mt. Kilimanjaro, located in the country of Tanzania, is the highest mountain in Africa and also the highest free-standing mountain in the world. A free-standing

mountain is a mountain that is not part of a mountain range. Another impressive feature is the Great Rift Valley. This massive valley was formed when tectonic plates moved to create a gash in the continent extending from the country of Mozambique to the Red Sea.

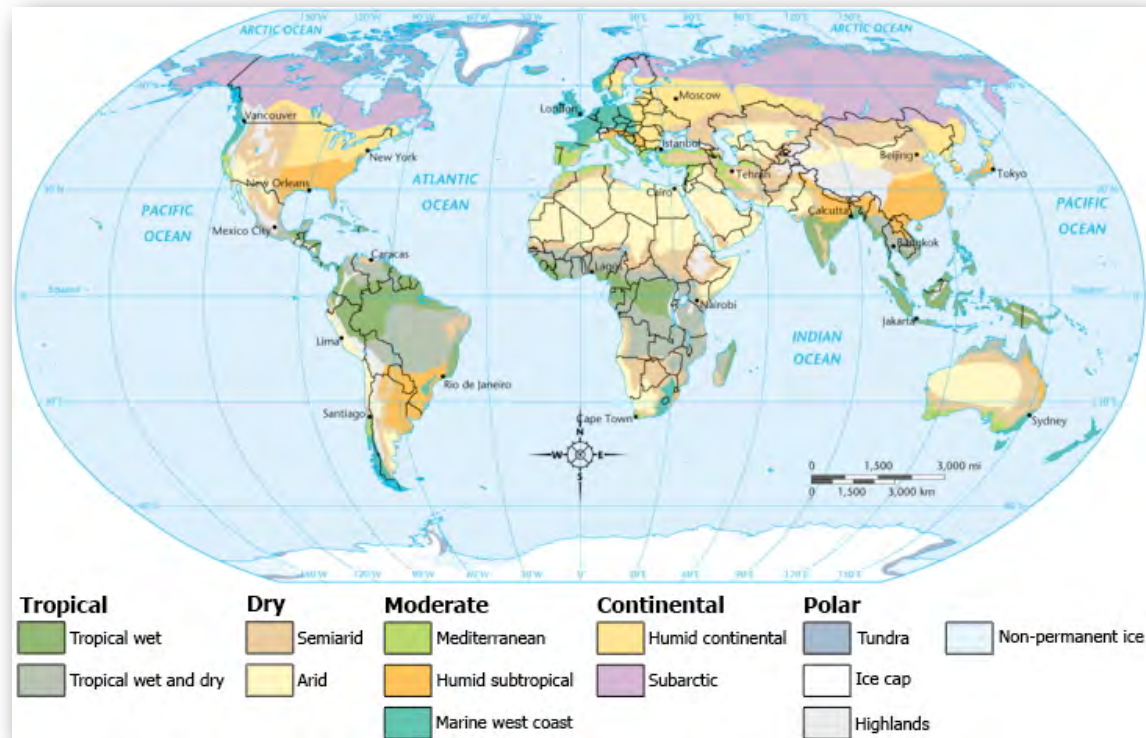


Image source: <http://upload.wikimedia.org/wikipedia/commons/c/c2/ClimateMapWorld.png>

Using the map above, determine other places in the world that have similar climates as this region? What location characteristics do they share?



Image source: <https://www.flickr.com/photos/ciat/5207540264/>

Vegetation varies greatly across the massive region. To the north, the Sahara gives way to the Sahel, a large area of mostly dry grassland. In the west, the Niger river cuts through the Sahel. This area is also home to the Congo river basin and the large rainforest that surrounds the river system. To the east, tropical grassland covers much of the region. Here the Great Rift Valley gives way to three large freshwater lakes and the two forks of the Nile River: the White and Blue Niles. The Southern portion of Africa is made up of a large low-lying area. Here drops in the elevation create many beautiful waterfalls. As you move further south the Namib and Kalahari deserts make up much of the far Southern region.

Critical Thinking Question:

Access to clean water is a huge issue throughout the world.
Why is clean water important?

Importance of Water

Water is present all over Michigan. There are lakes and rivers with millions of gallons surrounding our communities. We live in a state that is surrounded by the largest freshwater ecosystem in the world. It is safe to say we take the access to freshwater for granted. Not only do we have access to all this water, but we have full access to clean water. Unfortunately this is not the case in many parts of Sub-Saharan Africa.



Image source: http://commons.wikimedia.org/wiki/File:Flickr_-_usaid.africa_-_Water_pump.jpg

Interactive 5.3 Expedition Widget



This link (requires Flash and Internet Connection) will connect you to History.com's Expedition Africa. Balance risks and rewards to see if you can survive an African Journey

Apartheid

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa overcome the many challenges they face?



Image source: <http://upload.wikimedia.org/wikipedia/commons/1/12/ApartheidSignEnglishAfrikaans.jpg>

History of Apartheid

Imagine living in a place where signs like this are a daily sight. Imagine a country where the government has enacted a policy of total separation based on race. This policy would decide where you could live and work, along with who you could marry. Such a place existed.

For almost 50 years the white minority ruled the country of South Africa under a system of racial separation called Apartheid. This policy of racial segregation forced whites and nonwhites to live apart from each other. It offered few economic resources and less political power to the nonwhite ethnic groups. South Africa was a multiracial society made up of many different ethnic groups. Most ethnic groups fit into four classifications blacks, whites, colored and Asian. Apartheid then separated all these into white and nonwhite.

How did South Africa become a multiracial society? People have occupied the area for thousands of years. Some of the earliest black Africans began migrating to the area from Central Africa some 2,000 years ago. This group was made up of many smaller groups of black Africans which varied by ancestry and language.



Image source: <https://en.wikipedia.org/wiki/Coloured#/media/File:Coloured-family.jpg>

In the mid 1600s Europeans needed a place to stop along the long trade routes to the east. South Africa was just the place. Here they could stop to restock on freshwater, food and goods they needed. Soon the tip of Africa became the first white colony in South Africa. Dutch colonists, known as Boers or Afrikaners, began to flood in. Over time the colony grew, attracting settlers

from other parts of Europe. Dutch remained the language of the colonists and later they would begin to adapt many words from the other settlers as well as black African languages to blend into a new language called Afrikaans.

In the early 1800s, Great Britain took over the colony and South Africa became part of the British Empire. Soon the discovery of gold and diamonds attracted more colonists to the area. Both the Boers and British saw the wealth that could be obtained and began fighting over land. South Africa gained independence from Great Britain in 1934. By 1948 the official policy of apartheid was fully in place.

Life Under Apartheid

As the colonial period came to an end, South Africa became an independent country in 1910. The new country's government wasted no time and enacted a constitution giving whites complete control over the national government. Separation became a way of life for the people living in South Africa. For decades it continued as a way of life, until 1948 when the ruling whites enacted a government policy making apartheid official.



Image source: http://commons.wikimedia.org/wiki/File:Apartheid_Museum_Entrance,_Johannesburg.JPG

Under the policy many laws were created to keep ethnic groups separated and limit the right of the black South Africans. For example, the right to vote was only granted to people of European descent. Blacks had to live in areas known as “homelands” where there were fewer jobs and resources. There were separate schools, hospitals, restaurants and movie theaters for Whites and people of color. Public transportation was segregated and signs appeared all over public parks and beaches declaring “For Whites Only.”



Image source: http://simple.wikipedia.org/wiki/Apartheid_in_South_Africa#/media/File:Apartheid.jpg

Whites lived very well under the policy of apartheid. White schools were the best in the country. Whites had access to the best jobs, the best health care and the best overall living conditions. They of course controlled the government as well.

Asians and coloreds were second class to the Whites. Schools and other public services were limited. Their political rights, such as voting, were limited as well.

However, no group had it as difficult as the black South Africans. They were forced to move into the “homelands.” These areas were made up of some of the worst rural areas that South Africa had to offer. There were few jobs and the ones available did not pay well at all. Schools were very bad and there was little to no access to health care. Black South Africans were also limited on where and how they could move throughout the country. Free movement was not allowed, however, those who worked in the

cities could travel from their ‘homelands’ to work. In other areas of the country, poor townships or slums were where many Blacks lived. They were allowed in the cities during the day time, but at night were required to return to the slums.

Apartheid Ends



Image source: http://en.wikipedia.org/wiki/Disinvestment_from_South_Africa#/media/File:Boycott_-_Contaminated_with_apartheid_-_South_African_goods.jpg

Apartheid did not go unchallenged; many groups fought for decades trying to gain equality for Blacks in South Africa. The most prominent group to protest was the African National Congress (ANC). Founded in 1912, the ANC began fighting against the unfair treatment by Whites prior to apartheid becoming an official government policy. By the early 1950s the struggle for equality and fair treatment was drawing the attention of the world.

Black South Africans protested the laws and unfair treatment. The white government responded by arresting many of the protestors



Image source: <https://www.flickr.com/photos/ixtla/2362881762/>

and black leaders. In 1952, an ANC lawyer named Nelson Mandela took the lead in the fight for equality. Mandela and the ANC began a campaign to end the unfair treatment under apartheid. Soon many black leaders, including Mandela, were jailed. As the world took

notice, the United Nations condemned the policies of South Africa and, with the support of many countries, cut off trade to South Africa.

By 1989 many people around the world had become aware of the unfair treatment of Blacks under apartheid. F.W. de Klerk, an Afrikaner, became the elected president of South Africa. In the past, de Klerk had been an outspoken supporter of segregation. Eventually, he began to realize that South Africa would never see peace under apartheid. He made the decision to free Nelson Mandela and other leaders who had been jailed under the apartheid laws. Finally, by 1991 South Africa had abolished all apartheid laws.



Image source: <http://pixabay.com/en/nelson-mandela-quote-mural-belfast-539834/>

In 1994 democratic elections were held in South Africa for the first time in history. South Africans of all colors were allowed to vote. Nelson Mandela was elected as the first black president in their nation's history. From there he worked with many prominent leaders, such as Desmond Tutu, to help heal the divisions that had been created between the people of South Africa. Their program, the Truth and Reconciliation Commission, took the next several years to examine the human rights crimes that were committed during the apartheid years. In 1998 the commission's report condemned violations of human rights by both white and black South Africans. The commission also granted amnesty or forgiveness to some people who carried out some of the crimes.

Their work helped to create the groundwork South Africa needed to begin moving forward and recover from its past.

Critical Thinking Activity:

Use the links for Nelson Mandela Struggle in Posters. Answer the questions using the materials on the webpage. Use the Google doc to analyze the different posters.

Interactive 5.4 Historical Poster Analysis



Use this Google Doc to analyze the posters in the other link.

Interactive 5.5 Mandela in Posters



Use the posters on this website to answer the questions in the Google Doc

Sub Saharan Africa Today

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa overcome the many challenges they face?

South Africa Today

Despite all the changes, still has a long way to go. The government has created new programs and opened up many new job opportunities since apartheid ended. The government has passed the Employment Equity which identified the had been unfairly past. Groups like blacks, coloreds, Asians, women and the disabled are now given equal opportunity under the law. Business must look at all people equally when they apply and give fair pay to all workers.

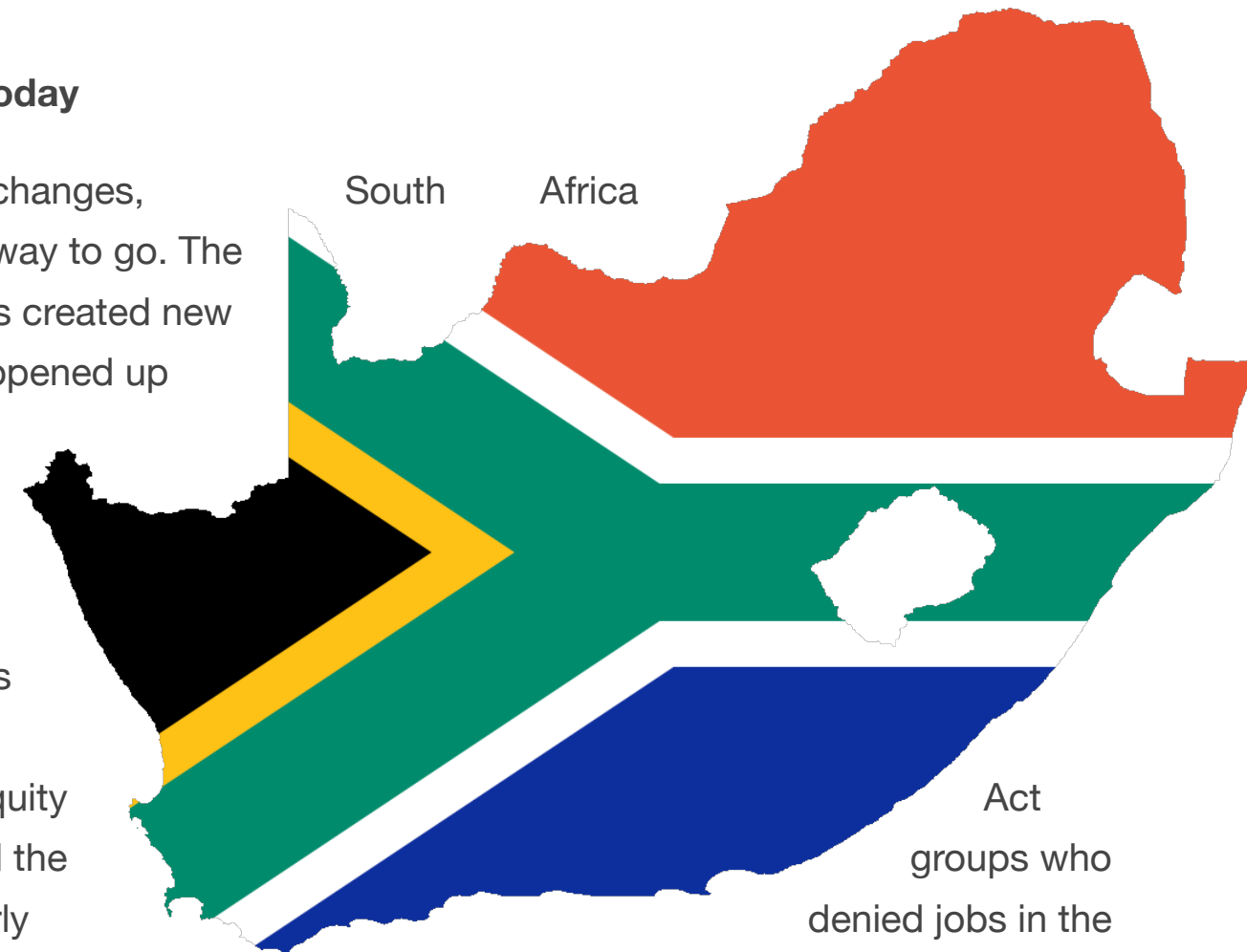




Image source: <http://commons.wikimedia.org/wiki/File:SouthAfricanStub.png>

However, there are still not enough jobs being created to supply all the people who need work. The growth in the economy has been slow. The number of unemployed people who are white has increased, however the majority are still blacks, coloreds and Asians. This slow economic growth has led to an increase in poverty. People all over the country are struggling to meet the most basic of needs.



Image source: <http://commons.wikimedia.org/wiki/File:South-african-school-children.jpg>

One answer to the issue of poverty is education. For the most part, the more years a person has finished in school, the more money he or she will earn as an adult. Under apartheid, nonwhites had limited educational opportunities. Schools were poor, in disrepair and didn't have the resources or qualified teachers to offer a good education. Once apartheid ended,

change came to the educational system. Students of all racial groups now attend the same school. More South Africans than ever are finishing high school and more are attending college. As more and more nonwhites receive an education, opportunities for better jobs and a higher quality of life will continue to increase.

Interactive 5.6 South Africa Steps Up Campaign to Create More Jobs



Learn more about how South Africa is trying to create more jobs to address one of their major problems at this website.

Other areas of society are improving as well. More and more cities are becoming less segregated. Even with cities opening up to all people, many nonwhites are not able to afford to live in the nicer areas of the city. Many still live in the poor townships and slums surrounding the cities. The government has been making an attempt to correct this issue. Over the years the South African government has

provided many homes. The government is also working to improve the township and slum areas. Streets and other areas of infrastructure are being updated and installed. There are also new schools, police stations, and health clinics being built in these areas.

Interactive 5.7 Changes since Apartheid



Click here to learn more about how the people of South Africa view the changes since Apartheid.

The People of Sub-Saharan Africa Today

Sub-Saharan Africa has a rapidly growing population. Today the region's people number around 800 million and it has been estimated that with the current rate of growth, the region could be looking at 1.5 billion by 2050. With this rapid rate of population



Image source: [http://commons.wikimedia.org/wiki/File:Africa_at_night_\(Cropped_From_Entire_Earth_Image\).jpg](http://commons.wikimedia.org/wiki/File:Africa_at_night_(Cropped_From_Entire_Earth_Image).jpg)

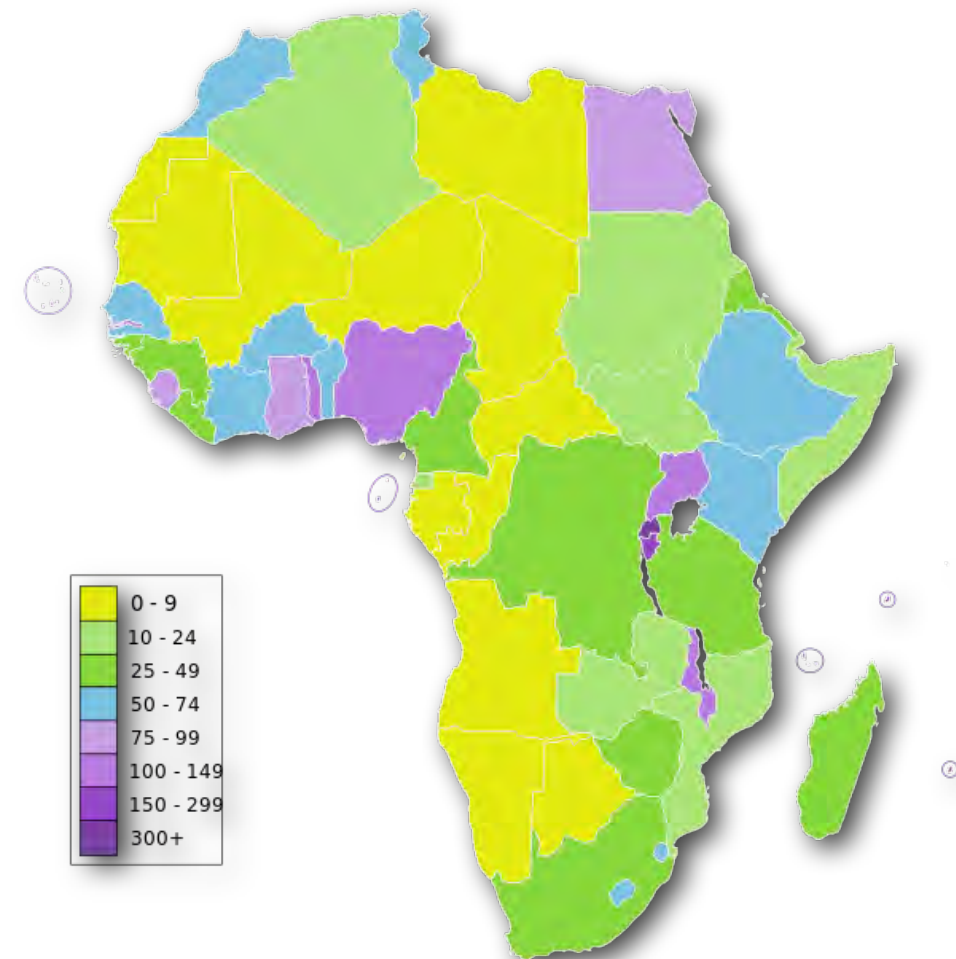


Image source: http://commons.wikimedia.org/wiki/File:Africa_densidade_pop.svg

growth, Sub-Saharan Africa rates as one of the largest areas of growth in the world.

Why has there been such an increase in population over the past few years? There are several reasons. First, better medical care and sanitation have lowered the death rates for all people, especially children. Second, during this time the region have seen some of the highest birthrates ever. More than wealth and privilege is the idea that large families are viewed as a necessity

in agricultural families. Visit the World Population Data Sheet to learn more about the population of the region, World Population Data

This rapid population growth has brought on challenges to the region. Many of the cities are overcrowded, leading to poor living conditions. Basic services like clean water and electricity are not provided everywhere. Many areas are also seeing stressed farmland. Most people still rely on farming for jobs and food,



Image source: https://en.wikipedia.org/wiki/Sahel#/media/File:Sahel_forest_near_Kayes_Mali.jpg

however much of the farmland in the region is being ruined by overuse, drought and erosion.

Interactive 5.8 Africa: Cities on Frontline of Sustainable Development



*Read more about sustainable
developments in Africa here.*

So where do all these people live? The population is not evenly distributed throughout the region. The main cause of the uneven distribution is because of areas where the land and climate are not welcoming to people. Many of these areas are desert where it is too dry to support either herding or farming. As a result, many of the region's people

live along the coast. Not only do coastal areas provide friendlier landforms for living conditions, but the climate is much milder and the soil fertile.

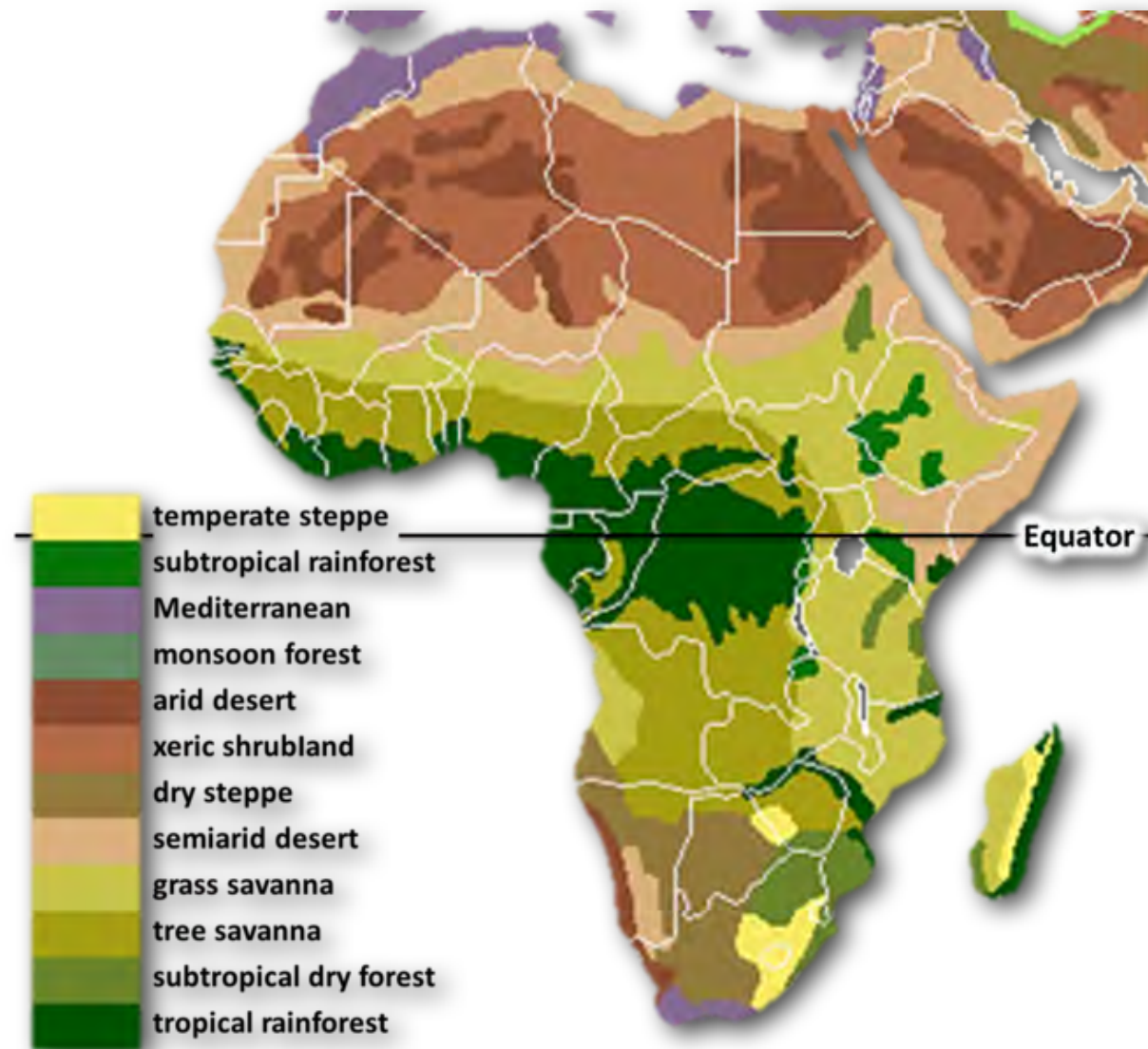


Image source: https://en.wikipedia.org/wiki/File:Vegetation_Africa.png

Although many still rely on subsistence farming to provide for their needs, there is a growing trend in the region towards urbanization. Urbanization is the movement from the rural areas to the urban . The major pull factor towards urban growth is the hope of steady income. The hope of better jobs, healthcare and education opportunities lead many to leave their old lives behind and move in pursuit of a better tomorrow.

The challenge of Health Care

As mentioned before, one cause of the rapid population growth in Sub-Saharan Africa is the advancement of health care. More hospitals, clinics and medical centers are now open than in any point in the region's history. Along with access to medical facilities, more drugs and medical supplies are available to the people. Even with this access, the death rates in the region remain high in comparison with the rest of the world. People still suffer from malnutrition, poor health, as a result of not eating the right food or enough food.

Another health-related issue is the lack of access to clean water to drink or good sanitation services. While widespread famines have killed many people, diseases such as malaria and ebola have as well. These and other diseases are a few of the major issues created due to the substandard health care found in Sub-Saharan Africa.

Economic Challenges

How do the challenges of the environment and physical features in Africa affect the economic activities of the people? The lives of the people living in Sub-Saharan Africa are always impacted by the physical environment surrounding them. The region is ever changing. One recent area of change is the involvement in the global economy. The people of the region face ever increasing odds, but this change in economic activities offers some hope for new opportunities. For many this may mean leaving their rural villages for the larger cities for work.

Many factors have gone into Sub-Saharan Africa being mostly a collection of agricultural societies. The natural resources of the



Image source: https://en.wikipedia.org/wiki/File:Niger_millet_Koremairwa_1214.jpg

area are very imbalanced. Due to unstable governments and the effects the colonization period had on the region's economy and society, many people rely on some type of agriculture to provide for their needs.

Farming is the main economic activity in Sub-Saharan Africa. Somewhere around two-thirds of the workforce are involved in some aspect of agriculture. Even though farming methods and crop production have changed, many still use traditional methods when farming. Most people in the region still use subsistence farming to provide for the needs of the family.



Image source: https://en.wikipedia.org/wiki/Women_and_agriculture_in_Su
File:Guinea_Sigui_farmer_woman.jpg

Once their crops meet their families needs, anything else is taken to a local market to be sold or traded for items the family cannot



Image source: [https://en.wikipedia.org/wiki/Agriculture_in_Angola#/media/File:Angolan_Potato_Farmers_\(5687186090\).jpg](https://en.wikipedia.org/wiki/Agriculture_in_Angola#/media/File:Angolan_Potato_Farmers_(5687186090).jpg)

produce on their own. These families live on small plots of land spread all throughout the African countryside. A small portion of the workforce has begun to work on commercial farms. These large scale farms grow cash crops, or crops sold for profit. Most of these farms are owned by large, foreign companies. They grow peanuts, cacao, and coffee. This method of farming came about due to the colonial economic system that was put into place during the time of European control. Both commercial and subsistence farming can be risky. The region lacks good farmland and one unfavorable growing season or a drop in the demand of a product can have a disastrous affect on the family or the economy of the area.

With so many people reliant on farming, how do the farmers meet the challenges of living in Sub-Saharan Africa? Challenges like



Image source: http://commons.wikimedia.org/wiki/File:C3%81rboI_Cacao.JPG

overgrazing, overworking the soil, and lack of modern farming equipment make farming difficult. The use of commercial machinery, frequent use of the soil, and the clearing of forests have created an erosion and desertification problem. This particular issue relates to the growth of the desert due to the soil losing its natural nutrients and turning to sand. Farmers have begun to use new methods to protect the land. They have begun to use different techniques of land-management to conserve the land. These methods include crop rotations, better fertilizers and seeds, and modern irrigation.

How does an economy based heavily on agriculture join in with the global economy? As Sub-Saharan Africa has looked to



Image source: http://www.google.com/imgres?imgurl=https://farm6.staticflickr.com/5168/5367322642_458bff8f01_o_d.jpg&imgrefurl=https://www.flickr.com/photos/ciat/5367322642&h=2848&w=4288&tbnid=qSf7EisM4veazM:&zoom=1&docid=ln8QZZ4GsgofFM&ei=m8FIVdfeLtjjoASsiYCgCA&tbn=isch&ved=0CCAQMygEMAQ

modernize itself, the people have looked towards different economic opportunities. The region has begun to develop more manufacturing but with the lack of trained workers, facilities and the equipment to process the natural resources they have, many countries have to develop industry from the ground up. To do this, many have to look to foreign loans and investments. Unfortunately the process has been slow.

Today the region's industry produces many products that just a few years back needed to be imported into the region. Food products and textiles, paper, leather and building materials are all areas of industry now produced in Sub-Saharan Africa. To produce these, business have had to meet the challenges facing them to create an industry infrastructure. Educational systems are still developing to provide people with the skill and education needed to work these skilled jobs. New challenges seem to arise when others are met. Power shortages cannot meet the growing demand for electricity and political conflict causes interruption in economic planning and resource allocation. Even with a growing list of challenges, the people of Sub-Saharan Africa are finding ways to meet them.

Critical Thinking Questions

5 Themes Review - The last few pages have discussed challenges in farming in the region. How have sub-saharan Africans adapted to or changed their environment?

The people of Africa face many different challenges. What are some ways people around the world could help the people of Africa? What are ways that you, living in Michigan, could help?

Section 5

The Global Connection

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does history impact the culture of a region?
3. How do the people of Sub-Saharan Africa

Global Connections- World's growing deserts

Are the deserts of the world growing? The US Department of

Agriculture map on this page shows the different areas of the world that are threatened by desertification. Desertification is a process where land that is relatively dry becomes

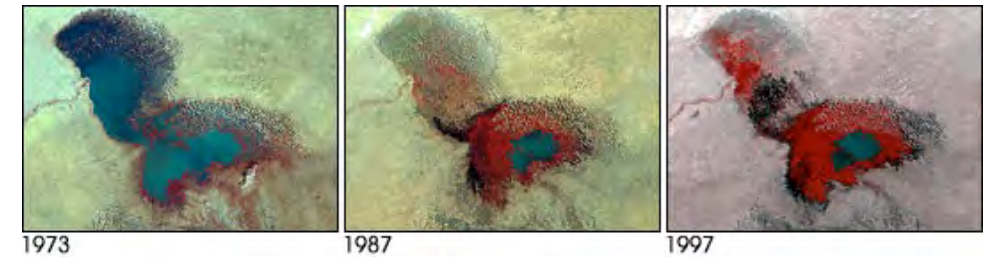


Image source: <http://en.wikipedia.org/wiki/Desertification#/media/File:ShrinkingLakeChad-1973-1997-EO.jpg>

Lake Chad is shrinking. In the photo you can see how Lake Chad has reduced in size over the past 30 years. The blue area in the middle is the water, as desertification has taken place, the water has dried up.)

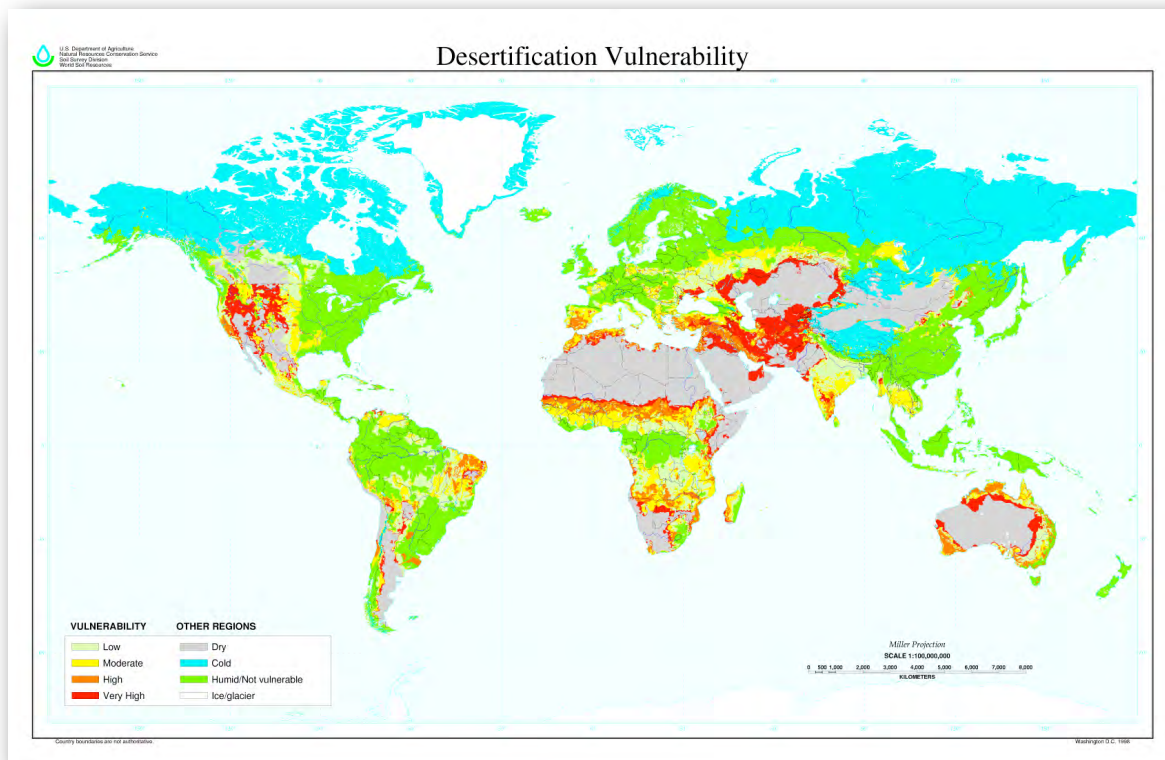


Image source: http://upload.wikimedia.org/wikipedia/commons/6/68/Desertification_map.png

more and more arid. Typically these areas begin to lose their bodies of water as well as the vegetation and wildlife that relies on the fresh water and fertile soil.

There are a number of factors that cause desertification, some are created by human activities others are due to larger processes.

Climate change is believed to be one factor in this process. In a number of areas long periods of drought has sped up the process. The other major factor is human activities. The way that people use the lands around the desert, known as marginal land,



Image source: <https://en.wikipedia.org/wiki/Desertification#/media/File:Cabrasnortechico.JPG>

Herd of goats in Chile, overgrazing is one activity that has led to desertification worldwide.

has an impact on the growth of deserts. Poor farming methods, overgrazing, deforestation and nonnative plant life can all leave marginal land open to erosion.

How can people adapt to living in these areas? What can be done to prevent further harm? All over the world people are dealing with the issue of desertification. In areas around China, people are trying multiples farming methods. One example is using crop rotation or a resting season, so that farm land can become fertile again and erosion can be reduced. In other areas, programs to prevent land from drying out as well as programs designed to prevent forest fires have ben created to keep the forests and grasslands from being destroyed. Less developed countries struggle with ways to afford these large scale projects.



Image credit: <https://en.wikipedia.org/wiki/Desertification#/media/>

File:North Sahara Anti sand shields.jpg

Click on the following links to learn more:

Interactive 5.9 National Geographic



Learn more about desert threats at this website!

Interactive 5.10 USGS



Learn more about Desertification at this website!

Looking through the Eyes of the World Your interactive journey through geography: Record your thoughts to the essential questions in your journal.

Interactive 5.11 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

South Asia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does population growth impact a region?
3. How does the population of a place impact how and where you live?



QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does population growth impact a region?
3. How does the population of a place impact how and where you live?

Movement

How do we move from place to place?
How do ideas move from place to place?
How do products move from place to place?



Regions

What region do we live in?
What are a region's characteristics?
What type of region is it?
What makes a region?



Human/Environment Interaction

How have we adapted to or changed our landscape?



Location

Where are we?
Where is a place?



Place

What kind of place is it?
What is it like there?



Over seven billion (7,000,000,000) people live on planet Earth. South Asia has over 1,000,000,000 people alone. Geographers determine regions of the world differently, usually based on characteristics that an area shares, such as language, climate, religion or economic similarities. For our purposes, South Asia includes: India, Nepal,



Image source: http://upload.wikimedia.org/wikipedia/commons/thumb/f/f3/South_West_Asia_location_map.svg/1280px-South_West_Asia_location_map.svg.png

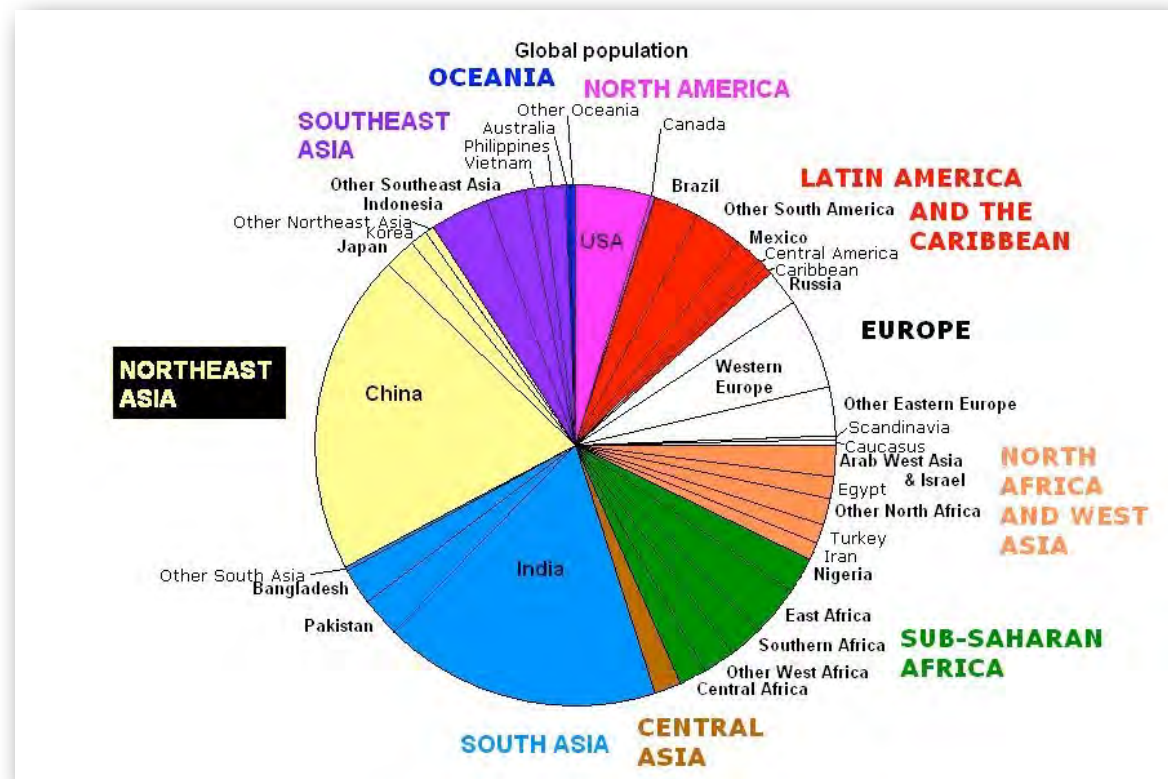


Image source: http://upload.wikimedia.org/wikipedia/commons/d/de/World_population_pie_chart.JPG

After China and India, what is the next largest slice of the pie chart above?

If India has 1.2 Billion people living there, approximately how many people might there be living in that next largest slice?

Bangladesh, Bhutan, Pakistan, Sri Lanka and the Maldives. India, with over one billion people alone, is the second most populated country in the world, following China. This “subcontinent” is surrounded by the Arabian Sea to the west, the Indian Ocean to the south, and the Bay of Bengal to the east. Bhutan, Bangladesh and Nepal sit nestled in the Himalayan Mountains to

the north. Sri Lanka lies just off the coast of southeastern India and The Maldivian islands stretch down toward the Equator.

More than 1 billion people live in one country in this region - India, alone, with predictions of it soon surpassing China within a decade or two. The map above shows the population of major world regions. As you will see in following sections a population this large presents some major challenges to people living in the region.

Interactive 6.1 Population Clock



The world population is constantly growing! Visit this website to learn more about the estimates and what population growth means. (requires internet connection)

Interactive 6.2 Top 10 Populated Countries



Learn more about the 10 most populated countries at this website (requires internet connection)

In this chapter we will be studying the theme of “region” while learning about this portion of the world. A **region** is a man-made label that helps divide the world into manageable chunks for study. Typically a region has a **unifying characteristic**, a similarity that brings the territory together, but not everyone agrees on regions. Even the authors of this book disagreed on where to group certain parts of the world.

How Are Regions Determined?

Sometimes a region is defined by physical characteristics. This can include climate, soil, and vegetation patterns. Others are divided by human characteristics such as culture, political structures, and economies.

The map on this page shows the regional areas of the United States as defined by the U.S. Census Bureau. Michigan is part of the Midwest. If someone lives in California however, is the Midwest really west? This is one problem with labeling a region. In the chapter on North Africa and the Middle East, the term “Eurocentric view” was introduced. A person in South Asia doesn’t think of themselves as South Asian. They think of themselves as Indian if they come from India. They consider themselves Nepalese if they come from Nepal. This is one instance of where it is not cultural characteristics that label a region, but rather, physical characteristics, as you will learn in the next section.

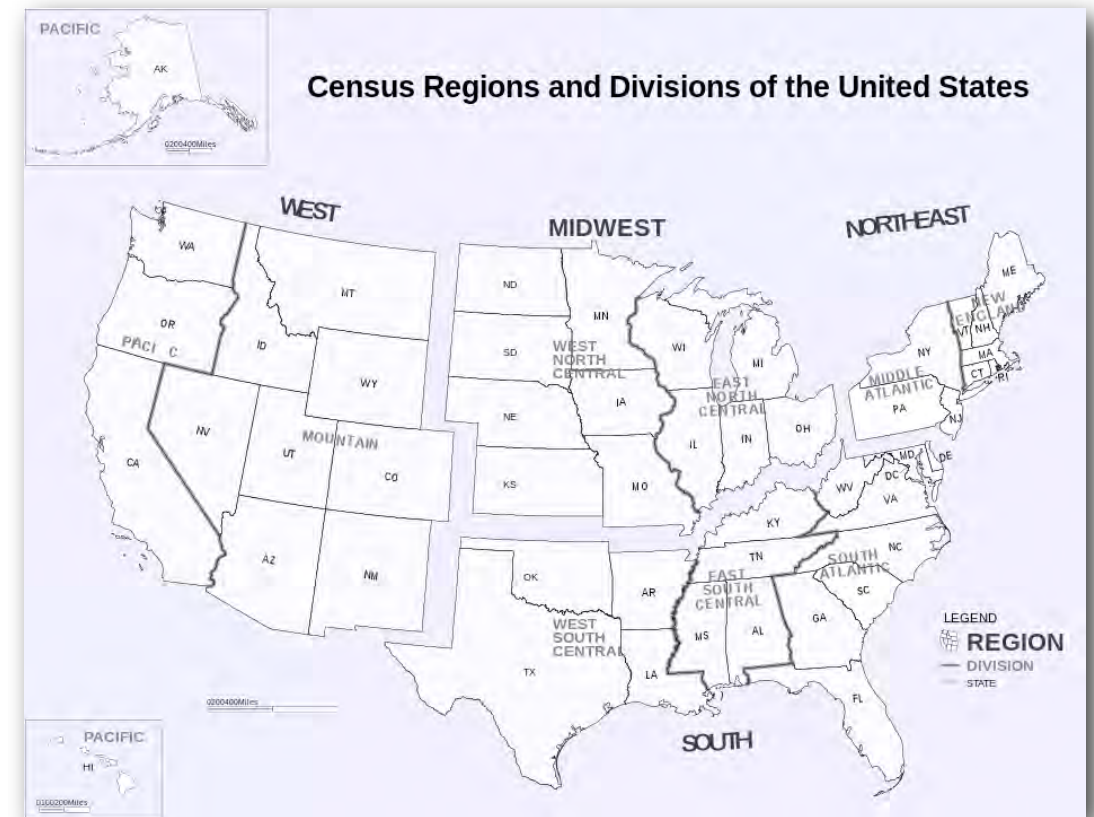


Image source: https://en.wikipedia.org/wiki/List_of_regions_of_the_United_States#/media/File:Census_Regions_and_Division_of_the_United_States.svg

Assuming that you are a student in Michigan:

What region of the state do you live in?

What region of the country do you live in?

What makes your region a region?



QUESTIONS TO GUIDE INQUIRY

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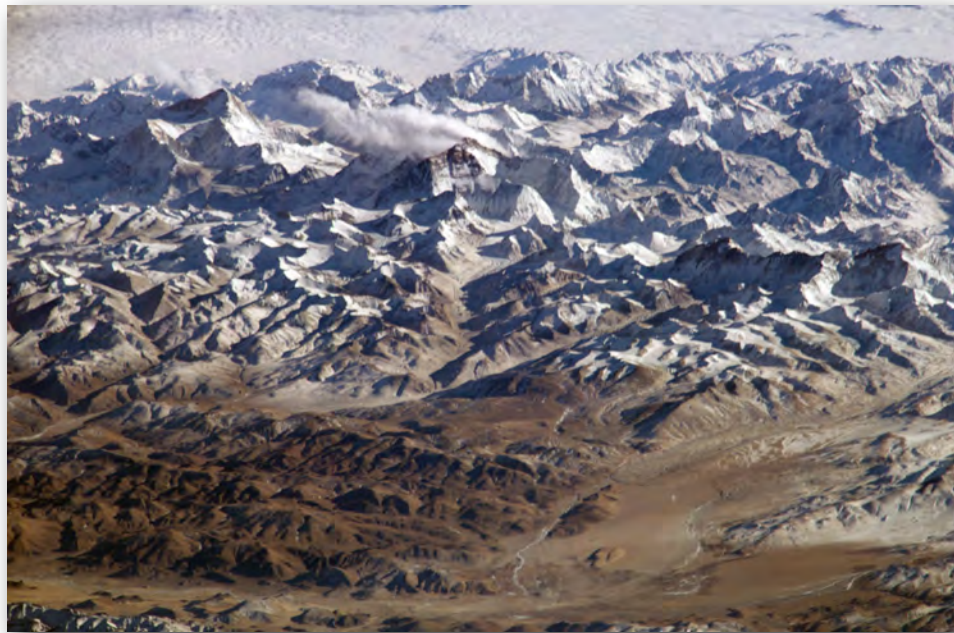


Image source: <https://upload.wikimedia.org/wikipedia/commons/7/79/Himalayas.jpg>

India is the largest country in South Asia spanning almost 1.3 million square miles. It is the seventh largest in the world and one-third the size of the United States. India has 22 official languages, with 1,000 additional languages and 22,000 dialects-more than any other country in the world. Most of their highly educated citizens speak English as a second language. Over 41% speak Hindi.

The Himalayan Mountain range stretches for nearly 1,500 miles, from Pakistan to Bhutan, along the ridge of India, separating it from Nepal. Mt. Everest, the tallest mountain in the world, reaches a height of 29,035 ft. Millions of years ago, sliding tectonic plates forced this mountain range to separate northern Asia from South Asia, forming a natural barrier against trading or traveling. You will learn more about this when you study the history of the ancient world.

Interactive 6.3 Google Maps - South Asia



*Explore the area with this embedded Google Map!
(Requires internet connection)*



Image source: http://upload.wikimedia.org/wikipedia/commons/5/58/Himalayas_Map.png

Within the same region lies one of the flattest areas on Earth-the Indo-Gangetic Plain, sitting between the Himalayan Mountains in the north and the Deccan Plateau to the south. The Ganges River, nearly 1600 miles long, runs through this area, emptying into the Bay of Bengal leading to the Indian Ocean. It is considered sacred by Hindus, who travel there to bathe in its holy waters and wash away their sins. This area is ripe for agriculture, making it ideal land for farmers. The Indus and Brahmaputra Rivers also run through this landscape.

In the northeastern part of India is Cherrapunji, in the Assam Hills, one of the wettest parts of the world with an average rainfall of 35 feet, or 428 inches a year.

Interactive 6.4 Rainfall in Cherrapunji



Learn more about the rainfall in Cherrapunji with this video (requires internet connection)

The Deccan Plateau is the peninsular part that juts into the Indian Ocean. It is surrounded by the Western and Eastern Ghats Mountain ranges, where roaming monkeys and elephants can be found.

Nepal

Nepal, a landlocked country about the size of Florida, lies between China to the north and India to the south. Of the ten highest peaks in the world, eight rest in Nepal, with the majestic Mt. Everest being the tallest.

Sherpas are an ethnic group that live in the region. Many are experienced climbers who often guide mountain climbers. The rugged Himalayas separate Nepal from China, with hilly terrain in the central region and flattening out to the south into swampland and forests. The highest percentage of people that practice Hinduism live in Nepal; however, Buddhism, founded by Prince Siddhartha Gautama of Lumbini, is determined to have been



Edmund Hillary a New Zealand native and Tenzing Norgay, a sherpa were the first to reach the top of Mt. Everest on May 29, 1953. Initial attempts started as early as 1921 but all fell short of reaching the summit. Since the initial ascent, over 10,000 people have attempted, with over 1700 making it and 175 died while attempting The mountain is named after Sir George Everest, the first person to record the location and height of the mountain..



born in Nepal around 560 B.C.E.

With few cars available, most people continue to travel on foot. The one international airport is found in Katmandu, the only major political city in the country and the most densely populated area of the region. Being one of the least developed countries in the world, many people are isolated due to the rugged and mountainous terrain.



Image source: [http://upload.wikimedia.org/wikipedia/commons/3/39/2015_Nepal_depremi_\(6\).jpg](http://upload.wikimedia.org/wikipedia/commons/3/39/2015_Nepal_depremi_(6).jpg)

Nepal recently experienced a severe and destructive earthquake on April 25, 2015, measuring 7.8 on the Richter Scale and killing upwards of 10,000 people. The last significant earthquake of 1934 killed 17,000. Katmandu is an overcrowded and poor place that rests near a major tectonic plate. When new construction occurs, there are no codes to insure they can withstand major disasters, such as earthquakes.

Bangladesh

Bangladesh, is home to 156 million people making it one of the most crowded places on earth. Bangladesh is a country smaller than the state of Iowa, an dhome to 156 million people, making it one of the most crowded places on earth. It is mostly a flat, fertile land, full of flourishing wild and plant life. The swampy Sunderbans forest in the southeast is home to the endangered Bengal tiger. This area is often hit by cyclones and tidal waves, causing severe flooding. During the rainy seasons, overflowing waters flood farms, often ruining crops, providing even less food for its growing population. This country is one of the poorest in the world. Although most people there are farmers, there is still not enough food to feed everyone. They are the largest producers of jute, a crop fiber used to make burlap. Like India and Pakistan, Bangladesh was ruled by Great Britain until their independence in 1947. At that time, Pakistan broke off into East and West Pakistan; however, separated by 1,000 miles. In 1971, East Pakistan became Bangladesh. Although disease and poverty are

rampant, economic growth is slowly increasing.

Bhutan

Bhutan is a mountainous, landlocked country sitting between India and China with 751,000 people in an area of 46,500 square miles. This predominantly mountainous area is home to some of the highest, snow covered peaks in the world, reaching up to 23,000 feet. Only monks live in the highest regions of the mountains in a few remote monasteries. Three-fourths of the people practice Buddhism, with the minority being Nepalese and practicing Hinduism. Thunderstorms and heavy rains are common. Most people in this country either farm crops such as wheat, rice, corn, and barley, or tend livestock, such as cattle, yaks, and sheep.

Sri Lanka

Sri Lanka, formerly called Ceylon, is a small island about the size of West Virginia. It lies between the Bay of Bengal to the north, the Gulf of Mannar to the west and the Indian Ocean to the south. It is 20 miles off the coast of India, separated by the Palk Strait. Several landforms are evident in this small country: mountains in the center, plains along the outer edges, a rainforest in the southwest corner. Wild animals, such as bears, crocodiles, snakes, elephants and monkeys call this home, along with over 3000 plant species. The bulk of the people are Sinhalese who

come from northern India and practice Buddhism. From southern India are the Tamils, following the Hindu religion. Most Sri Lankans are farmers, but wood carving, basket weaving, jewelry making and pottery are popular. Like other people living in this region of the world, Sri Lankans live with the threat of natural hazards. For example, a **tsunami** in 2004 killed over 30,000 Sri Lankans.

The Maldives

The Maldives, the smallest country in South Asia, is made up of nearly 1,200 islands that stretch southwest of India in the Indian Ocean and are surrounded by coral reefs. Many islanders migrate to Malé, the capital. Only 210 of the islands are inhabited by humans. Palm trees and other plant life are found on these tiny islands, with no island bigger than five square miles. Fishing is the island's main source of income, as is tourism. The islands have many master boat builders, creating boats holding up to 12 people. Many of the islands are getting bigger, while others are slowly eroding away. The coral reefs surrounding these islands are home to many varieties of sea life. Over 400 miles of sandy coastlines and beautiful lagoons attract thousands of tourists. The people of the Maldives are Sunni Muslim, with the only accepted religion being Sunni Islam. Visitors may quietly practice their personal religion; however, no other homes of worship are available.

Weather in the Region

Extreme weather conditions exist in South Asia. The southeast region receives record breaking rainfalls and the western part is desert. Devastating monsoons flood this area in the summer while the winter often brings extreme droughts and temperatures reaching 110° Fahrenheit. (Visual showing actual rain and desert.) Vacationers and the wealthy flock to the hills, or spots at a higher elevation with cooler temperatures, to escape the heat and humidity.

Interactive 6.5 Investigating Regions



Use this handout and Google to learn the answers to the questions on this handout. (Requires internet connection)

Interactive 6.6 If the World Were a Village



Take another look at the “If the World Were a Village” video.

If the video above were the only tool available to you, would you be able to label regions of the world using physical characteristics or human characteristics?

Explain your answer.

Section 3

History

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does population growth impact a region?
3. How does the population of a place impact how and where you live?



The Taj Mahal took 22,000 workers, 11,000 elephants and 22 years to complete. It was finished in 1653.(caption for Taj Mahal)

Image source: https://upload.wikimedia.org/wikipedia/commons/c/c8/Taj_Mahal_in_March_2004.jpg

The history of India dates back 6,000 years ago when the first people who lived there practiced both hunting and gathering. First settlements began near the Indus River Valley where the ground was fertile and ripe for planting due to river flooding. Thriving for over 900 years, they traded across the Arabian Sea.

Around 1500 B.C.E. the Aryan, or lighter skinned, Indo-European people, intruded upon the darker skinned, native Dravidians, pushing them out. With them came the beginnings of Hinduism, spreading across India. The Buddhist religion entered India in 563 B.C.E. due to Siddhartha Gautama and his approach to achieving a peaceful state of mind. The Mauryan Empire, the first empire, started in 321 B.C.E. and introduced a numerical system and the numeral zero (0), value of Pi, and the length of the solar year. Buddhism continued to spread.

The Gupta Empire, from 320-550 C.E., flourished with the advancement of the arts and sciences and the continued spread of Buddhism. The invasions of the Huns brought

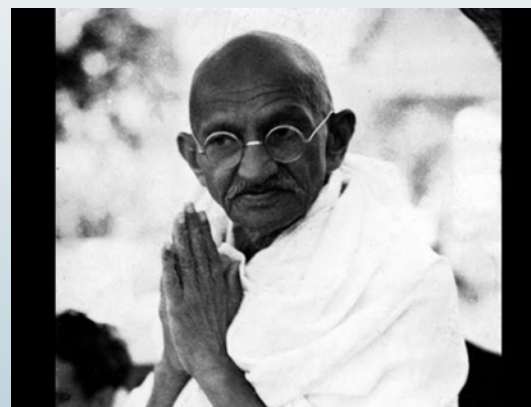
this empire to an end. During the Mogul Empire from 1526-1726 A.D., the Shah Jahan built the famous, white marbled Taj Mahal in memory of his favorite wife. He was later overruled by his son, Aurangzeb, in 1659, who imprisoned his father and beheaded two of his brothers.

By the 19th century, Great Britain controlled the country with the British East India Co., investors hoping to trade with India. Although, they did bring modern conveniences to the area such as the railroad system and the telegraph, they were brutal to the the Indian People. During WWI, Indians served in the British army with the promise they would have their own government at the end of the war; however, that promise was not kept. Peacefully protesting the government, the much revered leader Mohandas (later Mohatma, meaning “The Great One) Gandhi was arrested several times for his civil protests and sit ins.

At the start of WWII, he demanded independence from Great Britain and was denied. At the conclusion of the war, with Great Britain financially and emotionally drained, they established Jawaharlal Nehru as India’s Prime Minister. Tension between Muslims and Hindus increased, due in part to such a heavy presence of Hindus. Pakistan and India were granted their separate independences in August, 1947. Soon

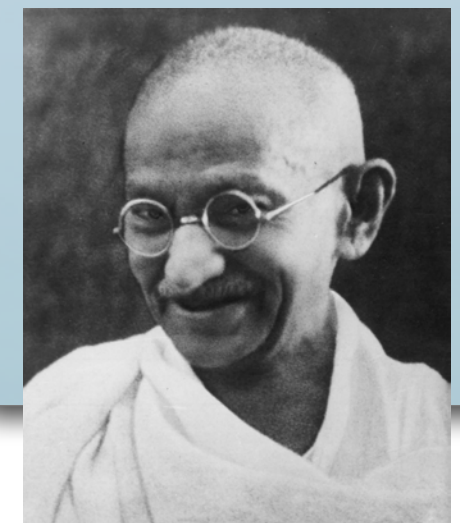
after, 10 million people left: Muslims for Pakistan, Hindus for India. The Muslim people wanted their own country; however, Gandhi’s opposition to separating the people was not well received. A man named Nathuram Godse, who was a Hindu Nationalist assassinated Gandhi in 1948. Godse had ties to an extremist group that opposed nonviolence and thought Gandhi favored Pakistan. Over the years tensions have continued between India and Pakistan

Interactive 6.7 Gandhi Biography



Learn a little more about Gandhi and his beliefs in this short video. (Requires internet connection)

Gandhi was born in 1869 in Porbandar, India. He studied law in London. Upon his return to India, he soon left for South Africa, a country also controlled by the British. In 1915, 21 years later, he went back home to fight the oppression of his people. One example of his civil disobedience was leading hundreds of people on a 240 mile trek to the sea to make their own salt, which had to be purchased from the government, from salt water. These types of protests led to his arrest and imprisonment.



Section 4

Population

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does population growth impact a region?
3. How does the population of a place impact how and where you live?

Bangladesh currently has a population that has exceeded 150 million. If you recall from a previous section, this is a small country that is roughly the size of Iowa in the United States. Iowa, in contrast to Bangladesh, has only 3.1 million people according to the 2014 United States Census.

The region of South Asia overall is over 1.7 billion. Population is a major challenge for all countries, and will continue to be so over the coming decades.

With this in mind, **how has population growth impacted South Asia?** To answer this question, first take a look at the two maps on this page.

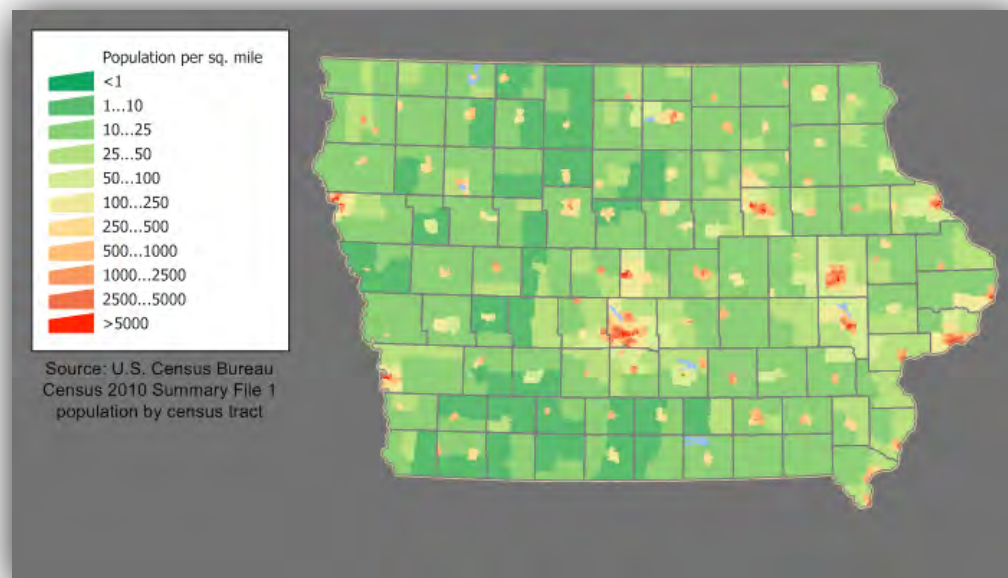
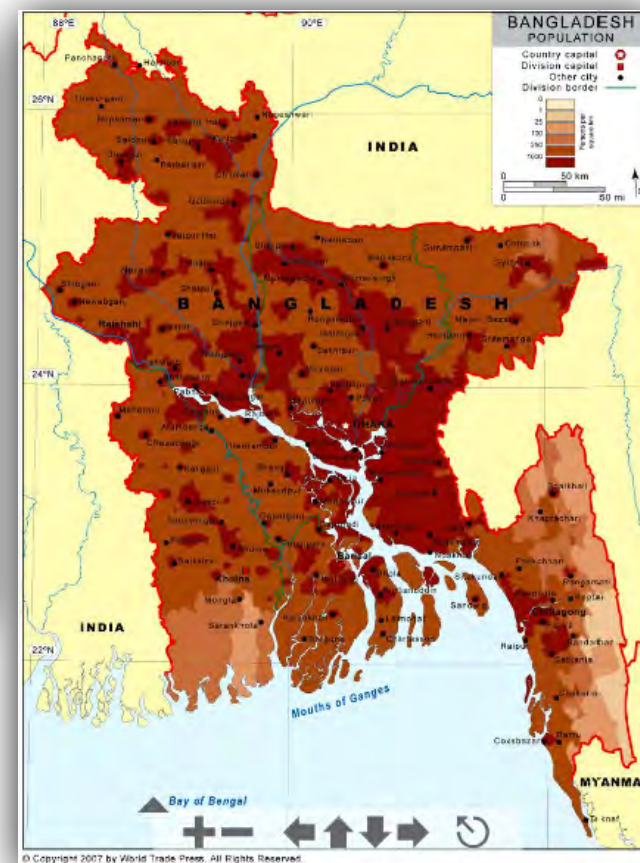


Image source: https://upload.wikimedia.org/wikipedia/commons/9/93/Iowa_population_map.png



These maps show the population density of two areas - Iowa and Bangladesh. What do you notice about the differences in population density in these two different areas?

To determine the population density of a region, all you need to do is find out how many people are living there and divide by the size of the area.

Population of Iowa: 3,107,000 (approximate)

Population of Bangladesh: 156,600,000 (approximate)

Size of Iowa: 145,743 Square Kilometers

Size of Bangladesh: 130,170 Square Kilometers

Try using the same formula to decide whether or not the population density of Bangladesh is similar to that of the United States:

Population of the United States: 314,000,000 (approximate)

Population of Bangladesh: 156,600,000 (approximate)

Size of United States: 9,842,000 Square Kilometers

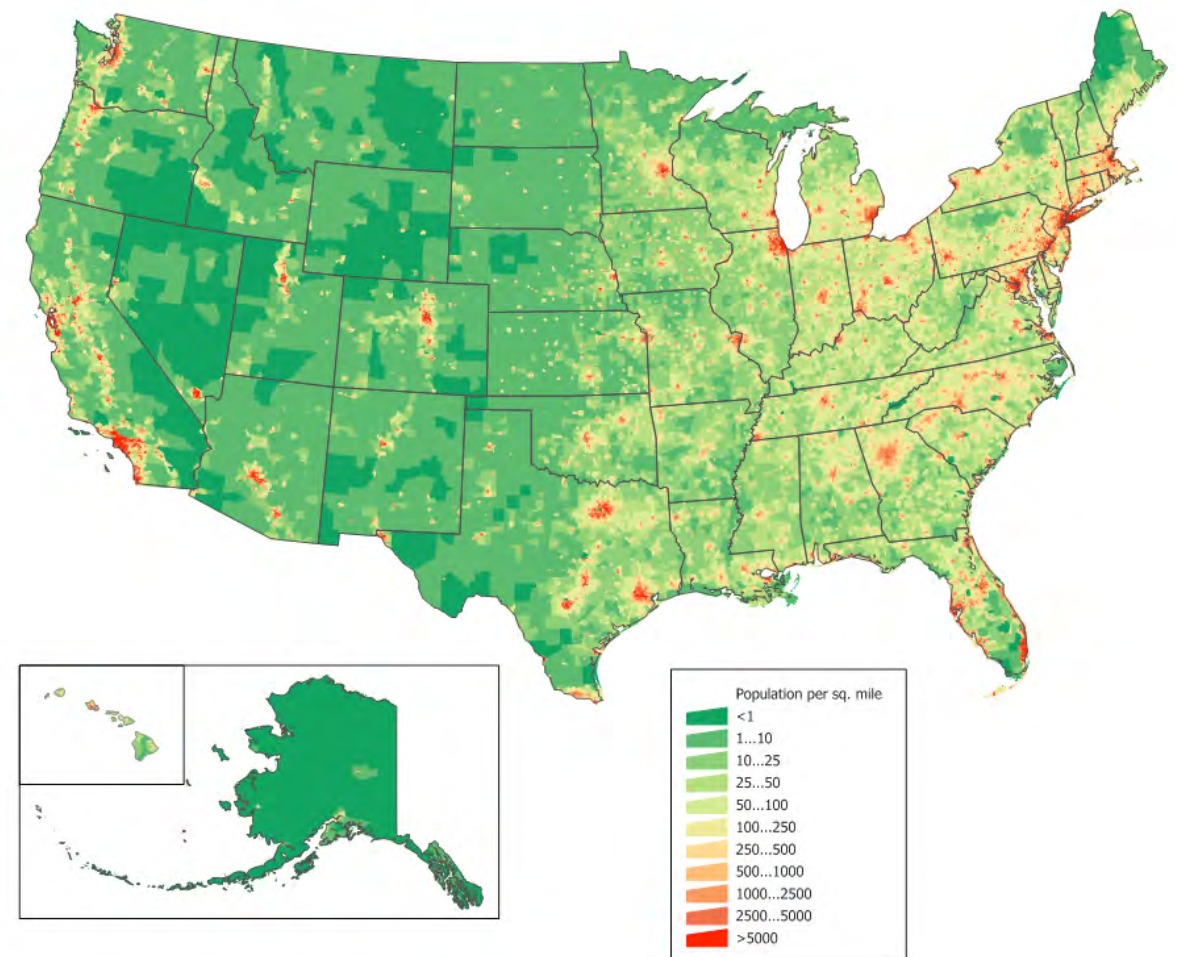
Size of Bangladesh: 130,170 Square Kilometers

Using the formula provided above, what is the population density of Iowa?

What is the population density of Bangladesh?

Which country is more crowded?

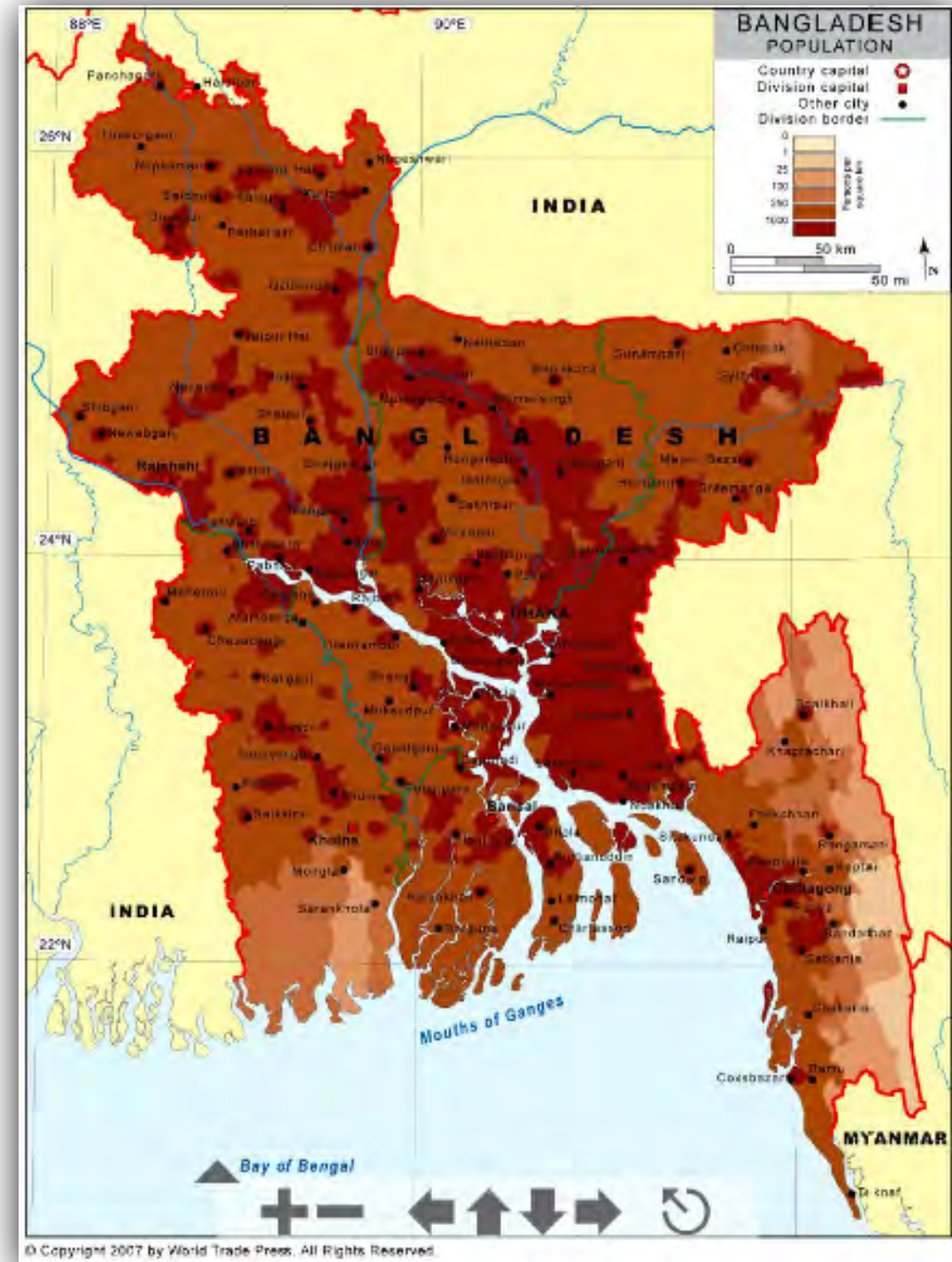
What problems might living in a crowded area cause?



There are two important things to note about the second part of the activity you just completed. The first is that the United States is much larger than Bangladesh. You probably noticed that by using the mathematical formula provided, the United State's population density is much lower than that of Bangladesh. The second thing to note about this activity is that people cannot live everywhere in the United States. High mountains, large deserts, extreme temperatures and other natural barriers to settlement exist. Because of this, when studying population it is also necessary to study the **population distribution** of an area.

The average population density for the planet overall is around 48 people for every squared kilometer. You can arrive at this average for the planet overall by using the same formula you used to calculate Iowa and the United States. The problem becomes, when studying the world overall, that the formula assumes that those people are evenly spaced out around the planet, when in fact, they are not.

Take a look at the Population Density map of Bangladesh once again. Where are the areas of highest concentration of people? Where are the lowest areas of concentration?



Problems with Population

Squeezing that many people into one area does not come without costs. While you will learn more about some of the population issues other countries in South Asia are facing in the next section, what problems does Bangladesh face?

Like many countries in the region, they face issues of overpopulation. The population is expected to reach over 200 Million by 2050. While the birth rate has started to taper off, the overall population continues to increase.

Over a quarter of the population lives below the poverty line. This makes several other population related issues big problems for the citizens there. Many people there have an inadequate diet and suffer from food shortages. This problem is worse in children. Almost two-thirds of the child population under five are considered under-nourished.

Because the population is impoverished, there is a shortage of affordable housing in the region. This has led to a rise in slums where many people end up having to live due to the lack of other choices.

The air quality in the region, due partially to industrial and vehicle pollution has become a major concern for the people living in Bangladesh. This has led to increased risks of being born with or developing asthma, and led to other respiratory and neurological problems. The problem is worse in children who spend more

time out doors, especially during the time of day when pollution levels have reached their highest. Add that to the fact that there is one qualified doctor for every 25,000 people on average, and Bangladesh can be considered to have some steep problems to overcome.

The Global Connection

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society, connected?
2. How does population growth impact a region?
3. How does the population of a place impact how and where you live?

Global Connections: India

One-fifth of the world's population is in South Asia. Today the people living there encounter less poverty and disease, and can enjoy a longer life expectancy.

India is a diverse country with hundreds of languages spoken, 22 of them official. Seventy percent of people living in India live in rural villages in dried mud and straw homes, working in low wage jobs: farming, agriculture, handicrafts, fishing.



Image source: [http://upload.wikimedia.org/wikipedia/commons/2/2a/Jute_Rope_\(%E0%AE%9A%E0%AE%A3%E0%AE%B2%E0%AF%8D_%E0%AE%95%E0%AE%AF%E0%AE%BF%E0%AE%B1%E0%AF%81\).jpg](http://upload.wikimedia.org/wikipedia/commons/2/2a/Jute_Rope_(%E0%AE%9A%E0%AE%A3%E0%AE%B2%E0%AF%8D_%E0%AE%95%E0%AE%AF%E0%AE%BF%E0%AE%B1%E0%AF%81).jpg)

Conditions are poor, skills are few and unemployment is high. India is the top producer of many goods: bananas, mangoes, jute (a long vegetable fiber used to make burlap), iron, and steel. Rice is a mainstay of farmers to feed their families. However, rural to urban migration is occurring. Mumbai, formerly called Bombay, has more people than New York City. It is a small island off the western coast and bridges link it to the mainland. Seventy percent of the population is under the age of 40



Image source: http://upload.wikimedia.org/wikipedia/commons/6/66/Mumbai_skyline88907.jpg

with 600 million people under 25 years old. With the population of the United States and China aging, India's population is young, vibrant and excited for their bright and promising future. It is estimated that by the year 2030, India could almost wipe out their poverty stricken areas.

In the early 1990s, the government moved away from socialism, allowing foreign businesses to come, opening up a free market. With lower wages and many of their youth speaking English, American companies settle in India attracting young people. Starbucks, Nike, Gap and Wi-Fi are all recent additions to India and the young people flock to anything coming from the Western world. Poverty has been reduced by 9% a year and their middle

class has doubled. New Delhi, the capital city since 1931, has a population of 22 million people. This modern city is full of skyscrapers, palaces, gardens and parks.

When Americans call companies for technical support, they often speak with a college-educated student in India, earning a much lower wage than students in the United States. India also has a thriving movie industry. Americans generally think of Hollywood as being the movie capital of the world; however, it is Bollywood in Mumbai that produces 800 films a year in comparison to Hollywood's 500-600 films.

The people of India still face many challenges. Bridges, roads, airports and railroads are in poor condition. They have more traffic deaths than anywhere in the world with the majority being school-aged children. Their caste system, dating back to ancient times, still exists despite it being outlawed in 1950.



Image source: [http://upload.wikimedia.org/wikipedia/commons/c/c7/Dalit_or_Untouchable_Woman_of_Bombay_\(Mumbai\)_according_to_Indian_Caste_System_-_1942.jpg](http://upload.wikimedia.org/wikipedia/commons/c/c7/Dalit_or_Untouchable_Woman_of_Bombay_(Mumbai)_according_to_Indian_Caste_System_-_1942.jpg)

Dalits, formerly called Harijan, or untouchables, are the lowest members of the caste system still practiced in India today. They face inferior accommodations and discrimination, not to be touched because they do the dirtiest and lowliest of jobs, such as clearing animal carcasses from the street, or cleaning toilets. About 170 million people, or 17% are among this group. Priests belong to the highest order of the caste system, followed by rulers, traders and farmers. Gandhi worked

extensively to eradicate this thinking, often visiting slum areas and staying in homes of the Harijan.

Go to your interactive journal and compare the caste discrimination in India to racial discrimination in the United States.

Interactive 6.8 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

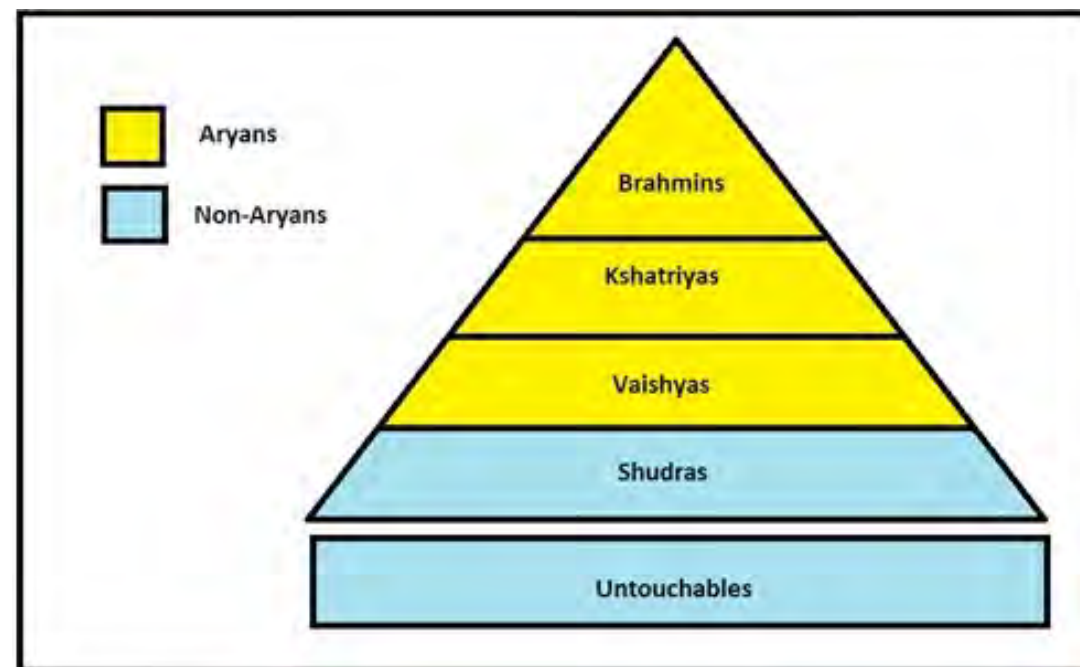


Image source: http://upload.wikimedia.org/wikipedia/commons/7/75/Caste_System.jpg

Over one-third of their population remains illiterate. Their government run educational system is poorly run and many families pull their children, enrolling them in private schools.

India produces more millionaires each year than any other country in the world, they also have one-third of their population living on 56 cents a day.

Over 80% of people living in India practice Hinduism. Hindus revere life and often believe that souls live eternally and come back in a different life form. Animals are sacred creatures, especially the cow, having its own holiday - Gopastami, when cows are decorated with ribbons and flowers. Islam is practiced by 138 million Muslims, the second largest Muslim population in the world. They believe in the teachings of Muhammad and follow the Qur'an, their holy book. Jainism and Sikhism are also major

religions. Sikhism, dating back to the 16th century, is a monotheistic religion that stresses the importance of doing good actions rather than merely carrying out rituals. Jainism is based on a reverence for life, self-denial and a vegetarian lifestyle.

Women typically wear a saree (sometimes spelled sari), or pants with knee-length shirts and jewelry representing wealth and/or religion. The saree is a traditional form of dress that has remained part of the culture for centuries. Women are often seen with a bindi, a colored dot on their forehead, representing femininity and marital status. It is considered an adornment and becoming more optional. Once widowed, the bindi is not worn. Men usually wear suits or a dhoti, a cloth wrapped around their waist. Young people tend to be seen in trending Westernized clothing.

Rice is the most common food in most of India; however, in the north wheat is quite common. Meals are typically spicy, and often include onions, coconut and curry. Most Indians are vegetarians; Hindus do not eat beef, as the cow is sacred and Muslims do not eat pork or drink alcohol. Traditional families will eat with their right hand only, or with a banana leaf. Women eat last and may be malnourished. More urbanized citizens will use utensils and a more Westernized diet is not uncommon. High rise apartments are plentiful in big cities,



Image source: http://upload.wikimedia.org/wikipedia/commons/7/7c/Sari_bleu.jpg

like Mumbai, but slums are prevalent as well. Roofs are flat, so they can be used to grow gardens, hang clothes out to dry and avoid the heat inside. The poor will find any available materials to create a makeshift home, such as aluminum and plastic. Families that live in rural areas will have homes made of brick, mud, stone and bamboo. Air conditioning is rare, even in larger cities.

In most cases, men are typically the head of the household. Women take care of all household chores and usually stay home to raise the family. It is becoming more common for women to seek an education. If a

woman works outside the home, she continues to take care of the household. A baby's first haircut is a meaningful and sacred time. Within their first three years, the entire head is shaved to eliminate past imperfect traits and to ensure a thick head of hair.

Religious holidays often unify India: Muslims celebrate the Hindu holidays of Diwali (Festival of Lights) and Holi, while the Hindus celebrate Eid al-Fitr, a celebration marking the end of Ramadan. It is common to celebrate the Christian holiday of Christmas. The people of India have their own Independence Day and New Year to honor, as well. Gandhi's birthday on October 2 is a special day with prayer services and religious services to honor the person who led the struggle for freedom and independence.



Image source: http://upload.wikimedia.org/wikipedia/commons/7/73/Slum_in_India.JPG

Interactive 6.9 Culture Grams - India



Using your knowledge of the region as well as the information at this website write a response about what makes you similar to Indian sixth graders. Do this in your Interactive Journal.

Interactive 6.10 India Map Puzzle



Test your knowledge of this region with this interactive map puzzle.

People of Mumbai

Think about what it would be like to live in a country in South Asia. How do you currently get to school? Do you ride a bus? Do your parents take you there themselves? Maybe you walk? How do students in countries in South Asia get to school? How might your classroom compare to theirs? How might your lunch compare to theirs?

The largest city in Michigan is Detroit, with a population just topping 700,000 people. India’s most populated city, Mumbai, has over 12,000,000 people. Think about the following questions as you write a response in your interactive journal.

Our earth is a crowded place, with a large population living in South Asia. Think about how the population of South Asia might affect you and jot your notes in your interactive journal.

What challenges might students in Mumbai have?

What challenges might students in Detroit have?

Do Mumbai and Detroit share similar problems?

What would a student from Mumbai be most surprised by if visiting Detroit?

As a tour guide for your region of the state, what would you show a visiting student from Mumbai?

Interactive 6.11 Distance - Mumbai



Take a look at the journey you would take from Lansing to Mumbai.

Europe and Russia

QUESTIONS TO GUIDE INQUIRY

1. How are we as members of a global community interconnected?
2. How do governments differ around the world?
3. How does our government compare to others?



Section 1

Physical Geography - Russia

QUESTIONS TO GUIDE INQUIRY

1. How are we as members of a global community interconnected?
2. How do governments differ around the world?
3. How does our government compare to others?

Geography

Russia, with over 6.6 million square miles of varied climate and landscape, is the largest country in the world. It is nearly twice the size of the United States or Canada. Covering almost one-eighth of the Earth's surface, it ranges from the Arctic Circle in the north,

to the borders of China in the south, from Europe in the west to the Pacific Ocean to the east. It spreads through two continents and 11 time zones. The Ural Mountains, some of the oldest mountain ranges, stretch from the north to the south. Russia borders more countries than any other and has 12 major seas.

Siberia, in the north, covers three-fourths of this landscape, with most of it being frozen tundra in the far north, meaning very little can grow because it is too cold. Okmyakon is the coldest inhabited city in the

Interactive 7.1 Google Maps - Russia



Use this interactive widget to zoom in on and see the physical characteristics of Russia. What is your description of where Russia is located?



Image source: http://upload.wikimedia.org/wikipedia/commons/3/3c/Russia_edcp_relief_location_map.jpg

world with temperatures dipping down to -70°F . Only small trees, shrubs and moss survive the frigid temperatures. Winters are long with few people inhabiting this region. The endangered Siberian tiger can be found in this region. Permafrost, or frozen ground, prevents any agriculture.



Image source: http://upload.wikimedia.org/wikipedia/commons/thumb/b/b9/Pt.altaica_Tomak_Male.jpg/640px-Pt.altaica_Tomak_Male.jpg

Forested areas are south of the tundra where pine trees and evergreens are found. Most of the western part of the country is forests and steppes, or dry, flat plains, covering a major portion of the remaining land. Russia contains four of the world's largest rivers:

Ob, Volga, Yenisei and Lena. The Lena stretches for 2,800 miles and is also one of the world's longest rivers. Lake Baikal, believed to hold one-fifth of the world's fresh water, is the oldest and deepest freshwater lake in the world. Over 330 rivers flow into the Baikal and nerpas, one of the only freshwater seals in the world is found in this lake.

The Kamchatka Peninsula juts into the Pacific Ocean, nearing the tendrils of Alaska. Over 150 volcanoes hover over the people living there. Most are non-active, but the threat of dangerous eruptions looms. The chain of islands rests within the **Ring of Fire**. The Kuril mountain chain, made up entirely of volcanoes, reaches from the southern tip of the Kamchatka Peninsula to northern Japan.



Image source: https://farm8.staticflickr.com/7404/12185220474_77940a013e_o.jpg

Moscow, the capital, is located in the western part of the country where the largest population live along the Moskva (Moscow) River. The Moscow Kremlin, an ancient fortress, rebuilt to retain its ancient heritage is home to the Russian central government. In addition to being the official residence for the President, it includes five palaces, four cathedrals, and

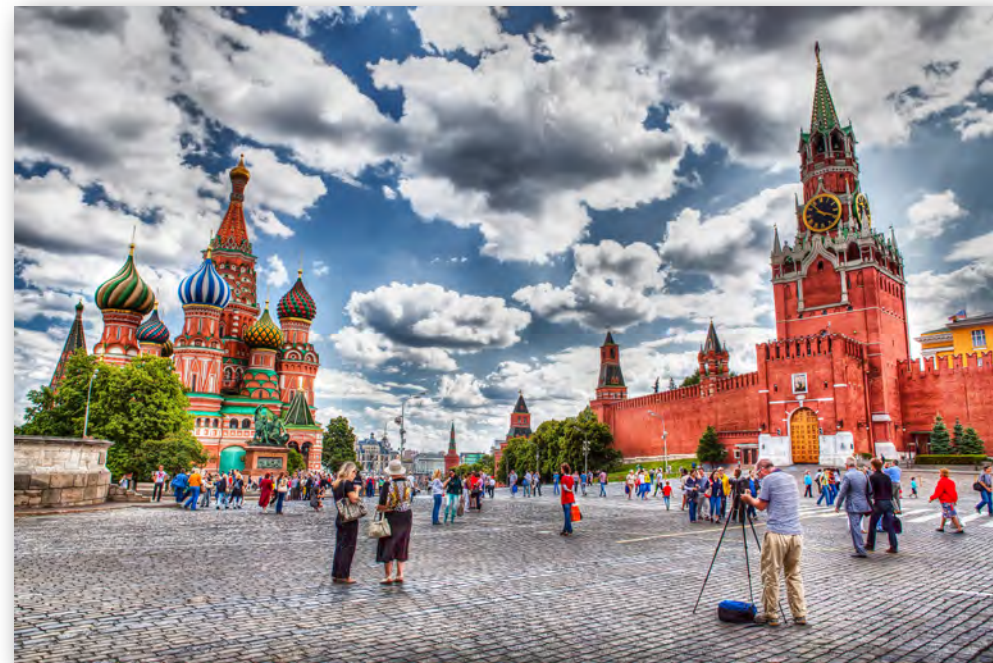


Image source: [http://upload.wikimedia.org/wikipedia/commons/1/13/Red_square_Moscow_cityscape_\(8309148721\).jpg](http://upload.wikimedia.org/wikipedia/commons/1/13/Red_square_Moscow_cityscape_(8309148721).jpg)

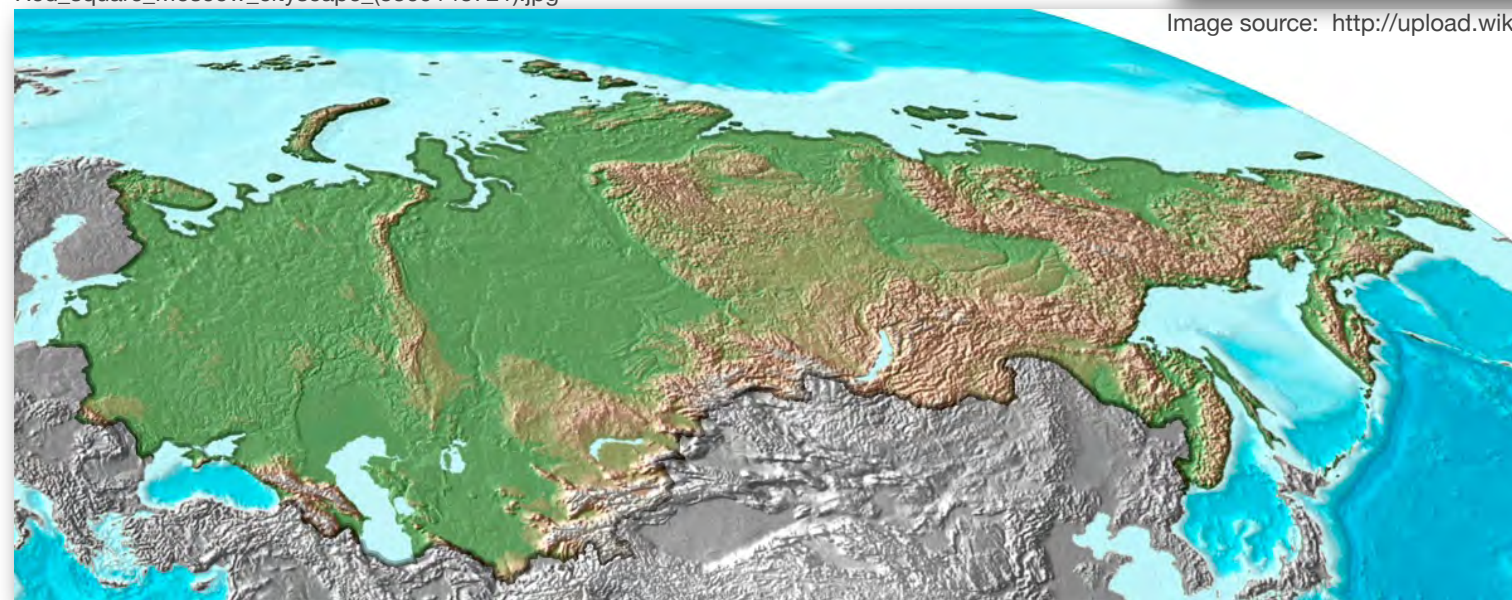


Image source: https://en.wikipedia.org/wiki/Geography_of_the_Soviet_Union#/media/File:SovietUnionPhysical.jpg

various other structures. It was initially constructed in the 1500s and has had many improvements and additions over its long history, always serving as a seat of power for those who ruled.

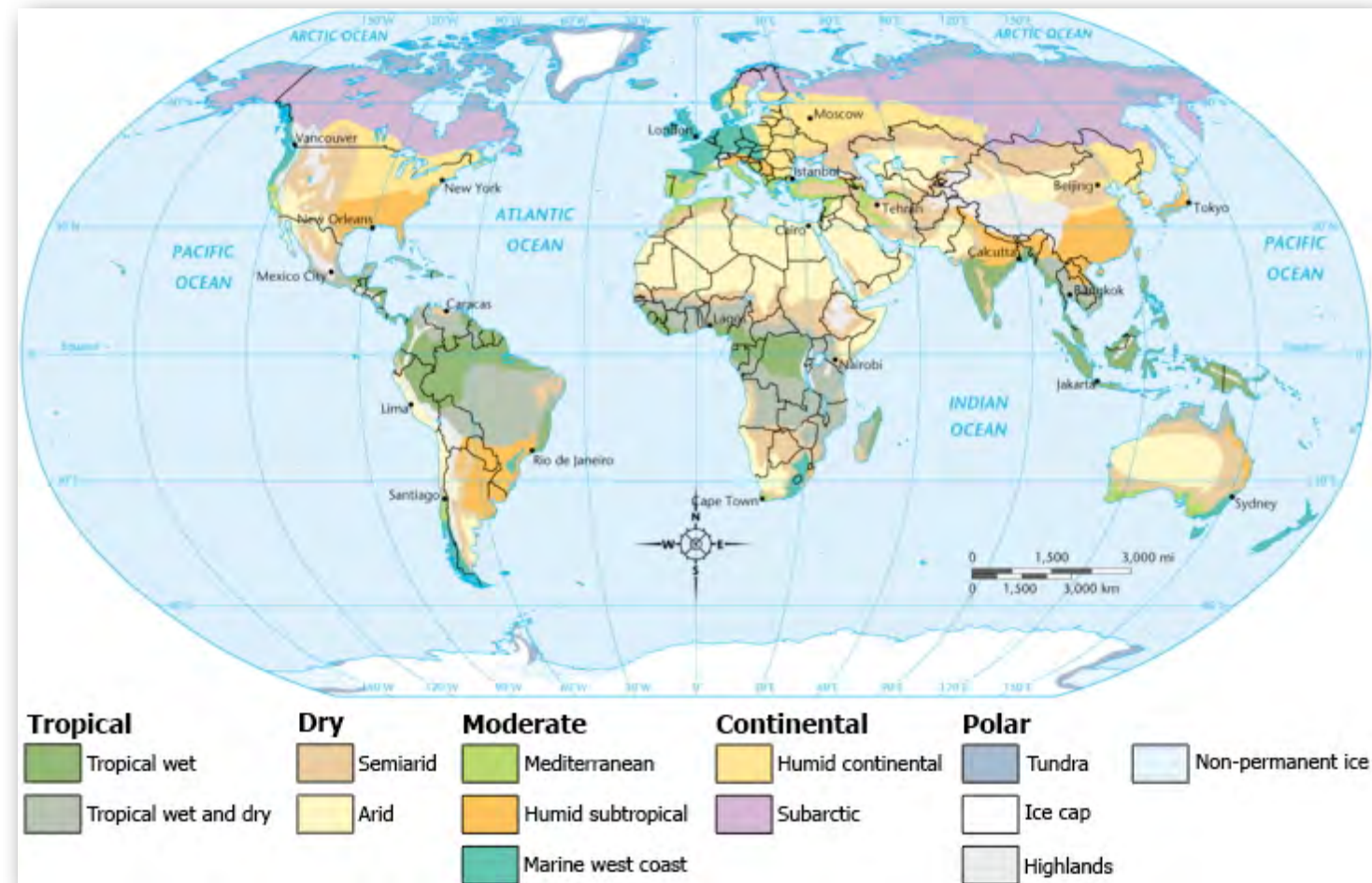


Image source: <http://upload.wikimedia.org/wikipedia/commons/c/c2/ClimateMapWorld.png>

Using the climate and physical maps on this page, answer the geographic question: “What is it like there?”

Section 2

Physical Geography - Europe

QUESTIONS TO GUIDE INQUIRY

1. How are we as members of a global community interconnected?
2. How do governments differ around the world?
3. How does our government compare to others?



Spotlight On: Vatican City:

Population in 2000: 798

Size: 109 Acres

City-State surrounded by Rome, Italy
Headquarters of the Roman Catholic church



Approximately 50 countries make up Europe, including the world's smallest country and parts of the world's largest country. Russia, the largest, extends all the way to the eastern part of Asia and the Vatican City, in Rome, is the smallest at .17 square miles. Less than 840 people live there, yet they have their own currency, post office, and security. The famous Sistine Chapel's ceiling painted by Michelangelo in the early 1500s attracts many visitors. The Pope, or leader of the Catholic Church, resides in this tiny country.

Europe is the second smallest continent, only larger than Australia; however, it is the third largest in population, with over 722 million people. Europe is made of many peninsulas.

The Ural Mountains and the Caspian and Black Seas naturally separate Europe

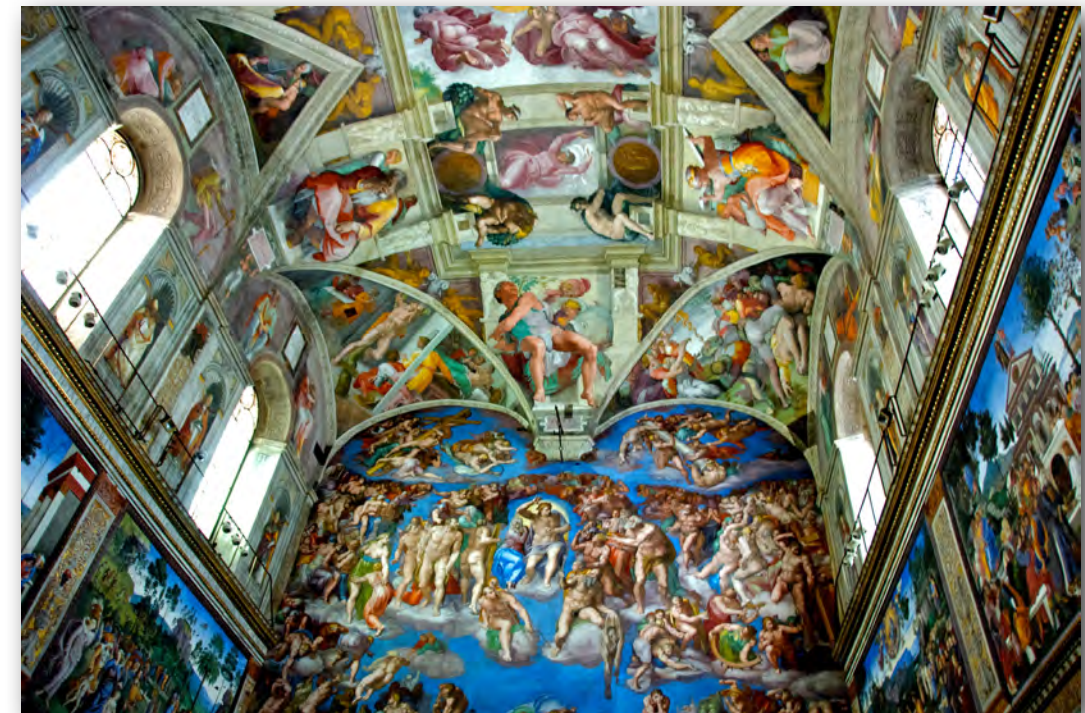


Image source: <https://www.flickr.com/photos/bribri/2476394326>

from the continent of Asia.

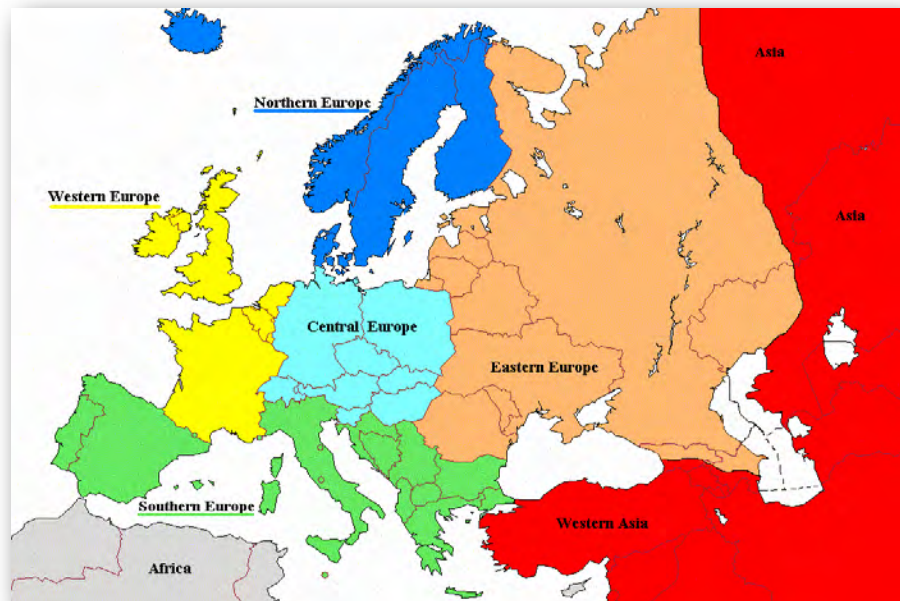


Image source: https://upload.wikimedia.org/wikipedia/commons/e/ec/Regions_of_Europe_Map.png Regions of Europe

Interactive 7.3

Google Maps - Europe



Use this interactive widget to zoom in on and see the physical characteristics of Europe.

Mt. Vesuvius

Mount Vesuvius's most famous eruption was in A.D. 79 and buried and destroyed the cities of Pompeii and Herculaneum. Located in Italy, it is the only volcano on Europe's mainland to have erupted in the last 100 years. With 3 million people living near by, it is also one of the most dangerous volcanoes in the world.

Interactive 7.2 Learning About Europe



Learn more about Europe and play some interactive games at this website (requires internet connection)



Image source: http://upload.wikimedia.org/wikipedia/commons/b/bc/Pompeii_Garden_of_the_Fugitives_02.jpg

Section 3

History of the Region

QUESTIONS TO GUIDE INQUIRY

1. How are we as members of a global community interconnected?
2. How do governments differ around the world?
3. How does our government compare to others?

Pre-History

The earliest settlers to Prehistoric Europe came from the African continent during the Paleolithic era, somewhere around 45,000 and 25,000 B.C.E. These were small bands of people who were most likely following animals to hunt. As these early Europeans settled in and adapted to their environment, they eventually began to develop more complex societies. Agriculture was developed around 7000 B.C.E., allowing people to settle in one place. Over the next 4000 years, many different technological advances were introduced from various other groups coming from the Mediterranean area. These ideas gradually spread northward and were adopted by some of the more well-known civilizations of this time period, such as the Minoans and the Mycenaeans. These groups flourished during the Bronze Age, when bronze tools and weapons were developed and first used.

Interactive 7.4 Faces of Ancient Europe



Explore the Minoan era in more detail by viewing this YouTube video (requires Internet connection)

The Greeks

Following the end of the Minoan and Mycenaean civilizations, around 7 B.C.E., the Greek civilization began and later flourished during the 5th to 4th centuries B.C.E. A period known as Classical Greece began with the defeat of the Persian invasion. Later, with the conquests of Alexander the Great, the Greek civilization spread from the Mediterranean Sea into Central Asia. Many aspects of the Classical Greek culture, including religion, architecture and philosophy, became a major influence on the Roman Empire. Rome then went on to continue to spread the ideas of the Greeks throughout Europe and the Mediterranean area. This is why the Greeks are viewed as being the culture which has provided the basis of all modern Western culture. More than any other aspect of the Greek culture which has flourished



Image source: <http://upload.wikimedia.org/wikipedia/commons/a/ac/BattleofIssus333BC-mosaic-detail1.jpg>

and spread is their idea of “Democracy.” Democracy means “rule by the people.” The Greeks developed a system of government with three different branches (much like the United States has today): a governing body who wrote laws; a council of representatives from the ten main tribes of Athens; and a court where citizens argued cases before a group of randomly selected jurors. “In a democracy,” the Greek historian Herodotus wrote, “There is, first, that most splendid of virtues, equality before the law.” Although Greek democracy only lasted a few years, this development has spread worldwide and changed the face of the world as it we know it today.

The Romans

Beginning in the eighth century B.C.E., Ancient Rome grew from a small town in central Italy into an empire that at one point covered most of Europe, parts of the Middle East, northern Africa and various islands in the Mediterranean. Like the Greeks, the Romans left a legacy that we can still see today. Latin, the Roman language, forms the basis of the Romance languages (Italian, French, Spanish, Portuguese and Romanian). The modern Western alphabet and calendar are based on those used by the

Interactive 7.5
History.Com - Ancient
Greek Democracy



*Learn more about Ancient Greek
Democracy [here](#).*

Romans. The transition of the Romans from a mythology-based religion to their acceptance of the new religion of Christianity contributed to the growth of Christianity as a major world religion. Rome functioned as a republic, where people were represented by officials in government for 450 years. After the rise of the general Julius Caesar in the first century B.C.E., the republic came to an end. Following the assassination of Caesar, Augustus rose to become Rome's first emperor. His reign began an age of peace and prosperity. By 300 A.D. the Roman Empire had grown

so large, it was divided into two parts. "Old Rome" would be part of the Western Roman Empire. The Eastern Roman Empire, also known as The Byzantine Empire, would be established in the far eastern part of the Mediterranean and have a new capital, Constantinople. Around 476 C.E., the Germanic peoples of northern Europe grew in strength and repeated attacks led to the fall of the Western Roman Empire. You will be learning much more about the ancient history of Europe in 7th grade.



Image source: http://upload.wikimedia.org/wikipedia/commons/5/5a/Roman_Empire_125_map.png

Recent History

With the influx of resources from the New World, technological changes occurred rapidly. From steam engine locomotives to the airplane, humankind was rapidly advancing. This was seen at the outbreak of World War I in 1914. With nations feeling invincible with their new modern armies, the powers of Europe took up sides. The Allied Powers, led by Britain, France and Russia (and by the United States in 1917), defeated the Central Powers which were led by the German Empire and Austria-Hungary. When Germany finally surrendered in 1918, the major nations involved in the war met at the Paris Peace Conference. The Big Four (England, France, United States and Italy) imposed their harsh terms in the Treaty of Versailles. Germany was forced to give up much of its overseas territories, made to pay large reparations, and was basically humiliated by the victors.

Totalitarianism

Following World War I, The Great Depression broke out in 1929. In Europe the economic problems faced by the people led to desperation. In these desperate times the people in many European nations demanded change, and this led to the collapse of democracy in many countries. Adolf Hitler was the leader of a small political party in the 1920s. As the living conditions worsened in Germany, his party became more and more popular. Hitler, who had been arrested at one time for attempting to overthrow the government, was appointed Chancellor of

Germany due to the large popularity he had with the German people. After rearming Germany, Hitler and his ally, Benito Mussolini of Italy, began taking steps to gain full control of Europe. After the invasion of Poland by Germany in 1939, Great Britain and France had seen enough and declared war. This was the beginning of World War II. Germany conquered France and had Great Britain close to defeat. After not being able to conquer the island nation, Hitler turned his forces on the Soviet Union. In 1941, after the Japanese attacked the United States, the Americans entered the war on the side of the Allies (Great Britain, France, Russia). In 1944, the Allies invaded France in the D Day invasion. Germany surrendered one year later.



Image source: http://upload.wikimedia.org/wikipedia/commons/thumb/4/41/Map_Europe_1923-en.svg/2000px-Map_Europe_1923-en.svg.png

The Iron Curtain

After World War II, Europe was divided by what Winston Churchill of Great Britain called, “The Iron Curtain.” The Soviet Union dominated the nations of Eastern Europe after the war. All of the nations in the region became communist states. The other nations of Europe were primarily democratic, capitalist countries who followed the leadership of the United States. The United States and the Soviet Union were the two world superpowers. Most of the non-communist countries in Europe joined a joint military alliance called the North Atlantic Treaty Organization (NATO). The countries guided by the Soviet Union joined the military alliance known as the Warsaw Pact. Germany was divided by the allies after the war, and remained so for decades, with West Germany being a democratic nation, and East Germany being communist.

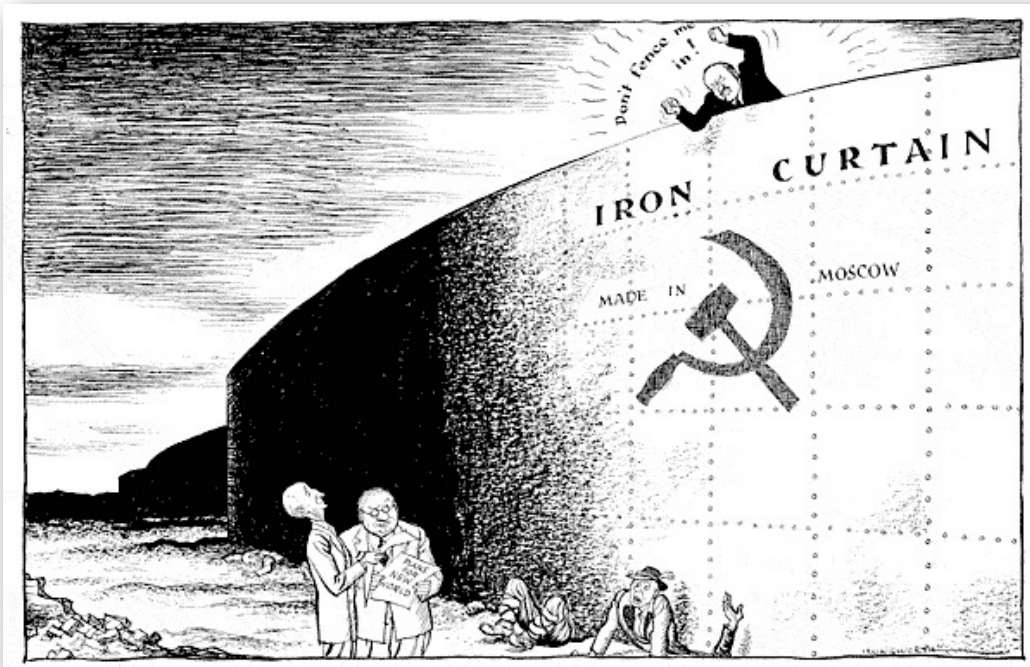


Image source: https://c1.staticflickr.com/5/4069/4642033407_f52f99d459_z.jpg

Fall of Communism

Under the leadership of Mikhail Gorbachev, the Soviet Union began economic and political reforms. But as the government began to allow its people more freedoms in 1989, communism in the nations of Eastern Europe began to fall. Even the Berlin Wall in Germany was torn down. This had been built in the 1950's to keep communist East and democratic West separate. This eventually led to the fall of communism and the break-up of the Soviet Union itself in 1991. As a consequence, Germany was reunited and Europe's integration grew deeper. The European Union, which had been an idea primarily aimed at the democratic western nations, began to expand to include many of the formerly communist European countries.

Interactive 7.6
History.Com - The
Fall of the Soviet
Union



*Click on the link to watch
the history of the Berlin
Wall and the fall of
Communism in Germany:*



Image source: http://upload.wikimedia.org/wikipedia/commons/2/25/Gorbachev_and_Reagan_1987-9.jpg

Section 4

Governments in Europe and Russia

QUESTIONS TO GUIDE INQUIRY

1. How are we as members of a global community interconnected?
2. How do governments differ around the world?
3. How does our government compare to others?



Image source: http://upload.wikimedia.org/wikipedia/commons/b/bc/Europe_flags.png

Political History

How are the governments of European countries different? Are there similarities? The region that consists of Europe and part of Russia is very diverse. The people come from around 50 different countries and even greater differences in cultures and ethnic groups.

The cultures and history of Europe and Russia have led its people to create some of the most powerful governments in history. Other factors, including political and economic struggles, have created change and revolution in many countries of the region. With the fall of Rome, many small kingdoms rose and fell in Europe and Russia over the next few hundred years. Modern nations began to develop in the mid to late 1400s. As time passed many of these new lands were being ruled by **monarchies** under the control of kings and **czars**.

The Modern Era saw two revolutions that would shape the political landscape for years to come. The Industrial Revolution would bring an economic change to the world. In Europe the creation of a manufacturing age led European nations to become the first developed countries in the world. Moving from an agricultural-based society to one founded in manufacturing led to many changes in the political landscape. The second revolution was political. By the mid-1600s a number of political revolutions were happening across Europe. The revolutions

began changing how countries would be ruled, in some cases this led to the rise of democratic governments. In others, Russia for instance, the political revolutions led to the rise of dictators.

Today elected governments of various forms rule most of the countries in this region.

Governments of Europe

Most governments in Europe are made up of elected officials who follow a democratic ideal. Most countries are **Republics**. A republic is a democratic form of government where elected officials represent the citizens. The biggest difference between many of the countries is their official heads of state. Some

countries, like the United Kingdom, have a prime minister who is the head of the government and a king or queen who is the head of state.

This form of **Constitutional Monarchy** keeps the tradition of a monarch but allows the people to govern themselves. In most republics throughout Europe you will find a prime minister as the head of government and a president as the head of state. The two roles differ greatly; the head of

government takes on the responsibility of being the leader of the government body, while the head of state is a figurehead who represents the country to other governments.

Russia

From 1922 to 1991 Russia was part of a larger nation known as the Union of Soviet Socialist republics (USSR) or the Soviet Union. The union was made up of subnational republics governed by the Communist Party with a highly centralized government and economy. As the state grew, it became a world superpower thanks in large part to its large military. In 1991 the superpower collapsed. The Soviet leader at the time, Mikhail Gorbachev, looked to reform the union and move it toward more of a social style democracy. This led to a nationalist movement and attempted **coup**, an attempted forced overthrow of a government. Both failed but succeeded in creating even more instability. In late 1991, Gorbachev resigned and the Union was dissolved into independent states, with Russia being the largest.

Interactive 7.7 Governments of the World



Follow this link to visit an interactive map that shows the governments of Europe and Russia

Interactive 7.8 More About Gorbachev



Click on the widget to watch a short biography of Mikhail Gorbachev

Even though Russia is not as big as the Soviet Union was, it is still the largest country in the world. Prior to the dissolution of the Soviet Union, the government owned and ran the country's farms, factories and businesses. As the government came to an end, the government sold off its factories and businesses. The sales did not benefit a majority

of the Russian people.

Today the businesses, farms and factories of Russia are privately owned. Unfortunately, they are not always run well. Many of them needed repair and modernization following the Soviet sell off, but new owners were unable or unwilling to pay for the needed repairs. Others made goods that were poor in quality in an attempt to quickly become wealthy. No one wanted to buy such poor goods. This resulted in many businesses failing and the economy struggling to move forward.

Government in Russia Today

The dissolution of the Soviet Union brought about many changes. In 1993 the Russian Constitution of 1978 received a revision to meet the needs of the new country. It states that the government

exercises executive power over the Russian Federation (Russia). The government is made up of three branches and the Central Bank. Each branch is broken down into different groups who hold responsibilities within their branch of government.

The members of the government issue decisions and orders that must not contradict the constitution, constitutional laws, federal laws and the presidential decrees. The government must submit and implement a federal budget, a financial policy for the federation and a uniform state policy in areas of health care, social security, culture, science and education. The government must also manage the federal property, ensure the country's defense, manage foreign policy and ensure the rule of law, human rights, public order, crime control and basic freedoms are upheld.

European Union

As World War II came to a close, many western European countries found it difficult to rebuild their shattered economies. As the reality of this struggle arose, a movement for European unity

Interactive 7.9 More About Russia Today



Click on this widget to learn more about Russia today.

began to take hold. Beginning in 1950, Robert Schuman, a French leader delivered a speech laying out ideas to bring peace to Europe through economic cooperation. Schuman proposed that France, Germany and others in Europe should work cooperatively to manage their coal and steel productions. Six countries agreed with him, and out of this the European Coal and Steel Community was born. This group created a common market for the coal and steel industry. Within the common market, trade barriers were removed and **tariffs** were lowered.

By the early 1990s a number of European countries agreed an economic community could be created within Europe to bring greater cooperation among the individual countries. In 1992 representatives from a number of European governments met to create the Maastricht Treaty. This agreement would set up the European Union, a new governing body aimed at creating **supranational** cooperation among its member countries. The prefix supra means “on top of.” Supranational is a term referring to the government of the European Union standing



Image source: http://upload.wikimedia.org/wikipedia/commons/f/fa/Port_talbot_large.jpg

above the governments of the member countries. The European Union (EU) uses supranational cooperation to work towards shared goals. Member countries give up some power and control over certain areas, but remain separate countries. While they are united in many ways they are divided in others. It is these forces that work both for and against the EU.

Have you ever traveled from one country to another? Is crossing an international border easy or difficult? What are some of the issues with traveling from the United States to Canada? Do we see those same issues when traveling from state to state?

In the United States, traveling from one state to the next is easy. There are no border checkpoints to cross or customs to pass through. When you travel from one state to the next, you have no need to trade your dollars in for the new state's money.

Imagine traveling in Europe. Prior to the creation of the EU, each time you went to another country it was much like traveling from the United States into Canada.

Interactive 7.10 How the EU Works



Learn more about how the EU Works in this video (requires internet connection)

How the EU Works Together

Living in the United States, people move freely from one state to the next. Someone might live in Michigan and work in Indiana or Ohio. There are borders defining a state's boundaries but people are able to cross them with no impact on their day to day lives. Europe is just slightly larger than the US. Many countries are comparable in size to US states, however, prior to the creation of the EU it was very

difficult to travel country to country. National laws made it difficult for someone to live in one country and work in another.



Image source: http://upload.wikimedia.org/wikipedia/commons/6/65/Euro_coins_and_banknotes.jpg

Today member countries of the EU have a common economic goal. They promote many different ways to promote economic cooperation between each other. One is the creation of a common market. This has been important in creating cooperation among member countries. In this common market, goods and people are able to move freely across borders. This allows people to have the benefit of working in one country and living in another. The people also have more choices in what they

can buy. With no tariffs on EU goods, prices are lower. This encourages people to purchase goods from EU countries and strengthens the economy at the same time. The EU has taken other steps towards economic cooperation. Many member countries have adopted a common currency called the Euro. Now Europeans no longer have to exchange their money as they travel and trade in other member countries. This makes living and doing business in EU member countries easier.



Image source: http://upload.wikimedia.org/wikipedia/commons/8/8b/EU_map_names_isles.png

member nations. Culturally, the EU has worked at creating a common European culture. The EU has its own Flag, has adopted the Beethoven song “Ode to Joy” as its national anthem, and celebrates Europe Day every year on May 9th. Politically, the EU encourages cooperation between the governments who run the member nations. The EU government works to bring its members together to work on issues they have in common. This allows them to work on large scale problems, like pollution, together.

Promoting a common European cultural identity is difficult. The countries of the EU are very diverse. They include people of many different languages, religions, beliefs, traditions and values.

Issues with EU Cooperation

The EU doesn't always work together. With all the diversity that makes up the member countries it can be difficult to get everyone to agree on everything. Member nations do not always agree on the issues they face or on how to address many of these issues. Economic differences create a number of strains within the EU. Generally speaking the Western European countries are wealthier than those in the rest of Europe. This can create a number of issues as the EU focuses funds on poorer countries to bring them up to the EU's economic standard. The differences in wages from country to country has prompted a number of people to leave poorer countries for jobs in wealthier ones. The adoption of the Euro is another issue. Not all member countries have adopted it as their national form of currency. Economically, this has created

some division within the EU. Politically, the government of the EU does not trump the governments of the member countries. Giving up political power is not easy for governments to do. Some member countries still want to make their own decision on issues like defense and foreign affairs, especially when they don't agree on a decision made by the EU. With the EU having no real recourse for countries who go out on their own at times, there is no incentive to follow all the decision made by the European Union.

The “Brexit”

In the summer of 2016, following years of discussion, two very vocal groups of people once again brought the issue of the United Kingdom (Britain, Wales, Scotland, and Ireland) remaining in the European Union. On one side of the debate, “Britain Stronger in Europe” was the name of the group campaigning heavily for Britain to remain in the union. “Vote to Leave” was the official group that was pushing for a break. On the one side, those who wanted to withdraw argued that membership undermined their own sovereignty. The other side agreed, but argued that in a world with super powers, the benefits of being part of a massive organization such as the EU outweighed the loss of some power.

When put to a vote, 51.9% of the people living in the United Kingdom voted to leave. The process of leaving the EU will take several years to complete, and it has already had an effect on the markets across Europe.

For more information on the Brexit, take a look at this continually updating website with backstory, history, and the latest news.

Interactive 7.11 The Brexit



Learn more about the Brexit at this website from the BBC.

Now it's time to return to your interactive journal and think about the questions that have guided this chapter:

How are we as members of a global community interconnected?

How do governments differ around the world?

How does our government compare to others?

Interactive 7.12 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

Oceania, Australia and Antarctica

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?

Section 1

Introduction to Oceania

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image Source: <https://www.google.com/maps/@-13.1858046,175.1825482,9581953m/data=!3m1!1e3>

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Take a look at the map of Oceania pictured above. What do you first notice when looking at this map? Do your eyes head to the green shaded islands? Do they head to the brown and gray shaded Australia? Do they go to the great blue expanse of the Pacific Ocean?

Oceania is an area of the world that has some very unique characteristics. More than one third of the earth's surface is comprised of the Pacific Ocean and Oceania . In addition to all those islands, Oceania also includes the smallest continent in terms of land size: Australia. You can look anywhere in Oceania and find strong cultural traditions, rich history, and strong geographic features that vary widely depending on where you go.

As you study the region you are invited to think about the following questions:

How are we as members of a global society connected?

For many people living in the United States, particularly those in Michigan, Oceania is a far away place. As you have been learning in each chapter however, we share social, political, economic, and cultural connections with all regions of the world, and Oceania is no different. As you have been doing in other sections, as you study this region look for examples of these connections.

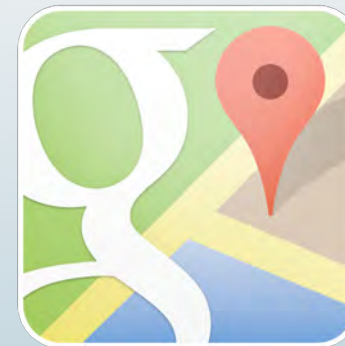
How does where societies develop influence their place in the world?

You cannot study the history of a place without looking at how geography has influenced a culture's development. This second question will be one you work cooperatively to answer

with other classmates to study a specific piece of Oceania to answer this question.

In addition with each section you will also explore some supporting questions. These will help you answer the larger compelling questions:

Interactive 8.1 Google Maps - Oceania



Take a look at the interactive Google Map linked above (requires internet connection) - What physical characteristics of place can you observe?

How do people survive when surrounded by oceans?

Before we begin exploring different regions in Oceania, take a moment to look at this Interactive map.

Zoom in and out and make note of what landforms you see and what other physical characteristics of place you can observe. What human characteristics can you observe?

Five Themes Practice - Location: Describe where Oceania is located using the maps in this section.

Section 2

Physical Geography - Oceania

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by

The Pacific Islands

Here is a map of the world with longitude and latitude lines displayed. Part of Oceania has also been labeled inside the green circle on the map. Use the map to answer the following questions:

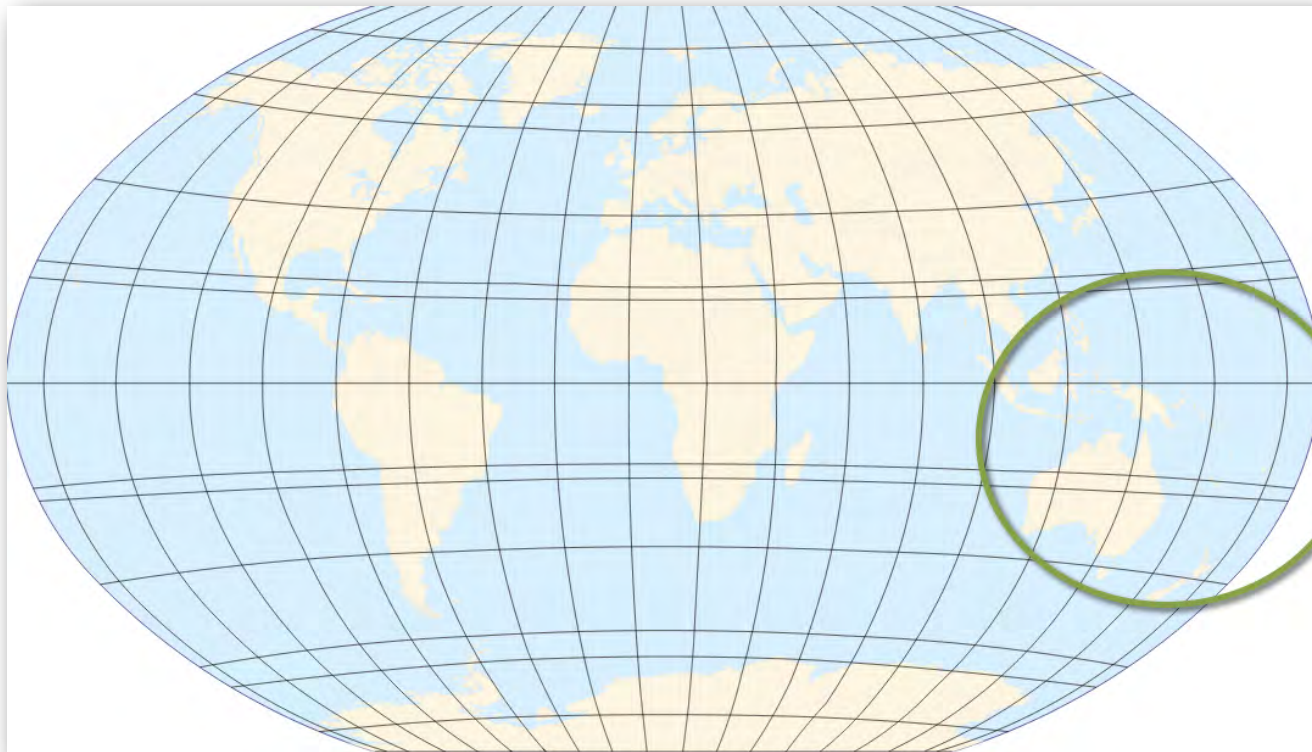


Image Source: http://upload.wikimedia.org/wikipedia/commons/5/56/World_map_longlat.svg

1. Based on location alone, what characteristics do you believe this region may share with other parts of the world that are located in a similar zone? HINT: Think about what you know about South America, Africa, southern Asia.
2. Based off of location alone, what economic activities do you believe people in this region may undertake?

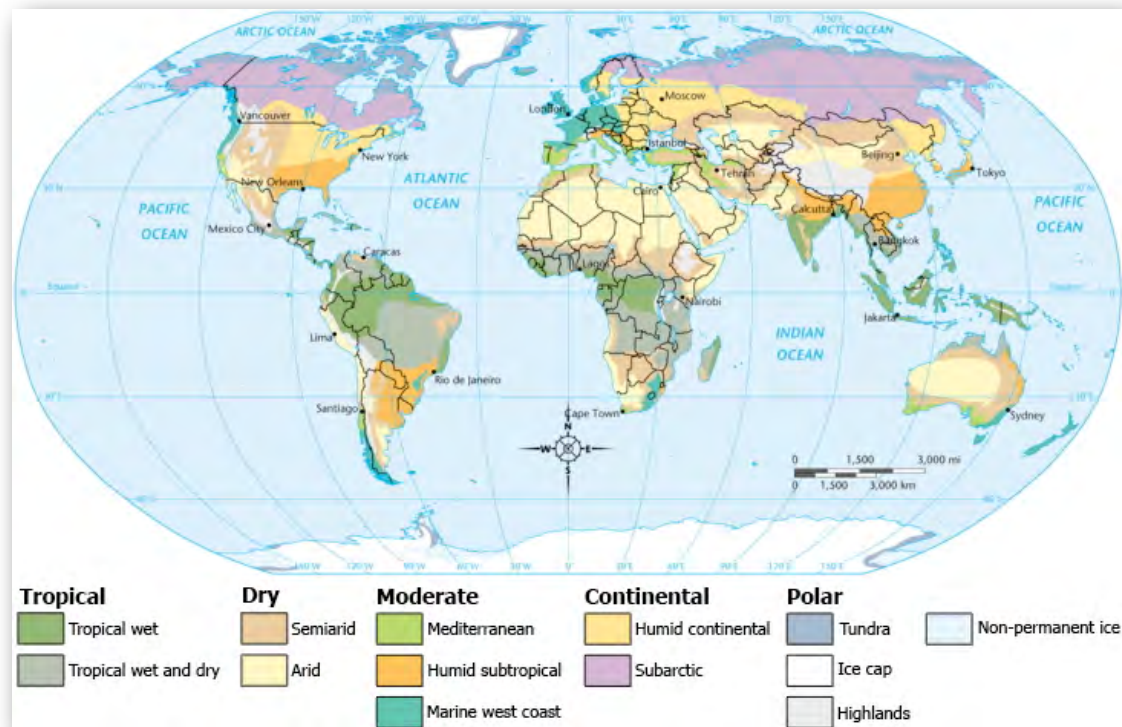


Image source: https://upload.wikimedia.org/wikipedia/commons/d/df/ClimateMap_World.png

Here is a climate map of the world. Review your predictions. Were you right? Where might you have been incorrect?

When visualizing this region through another climate map, what observations can you make? Try to answer the following questions using the second Map:

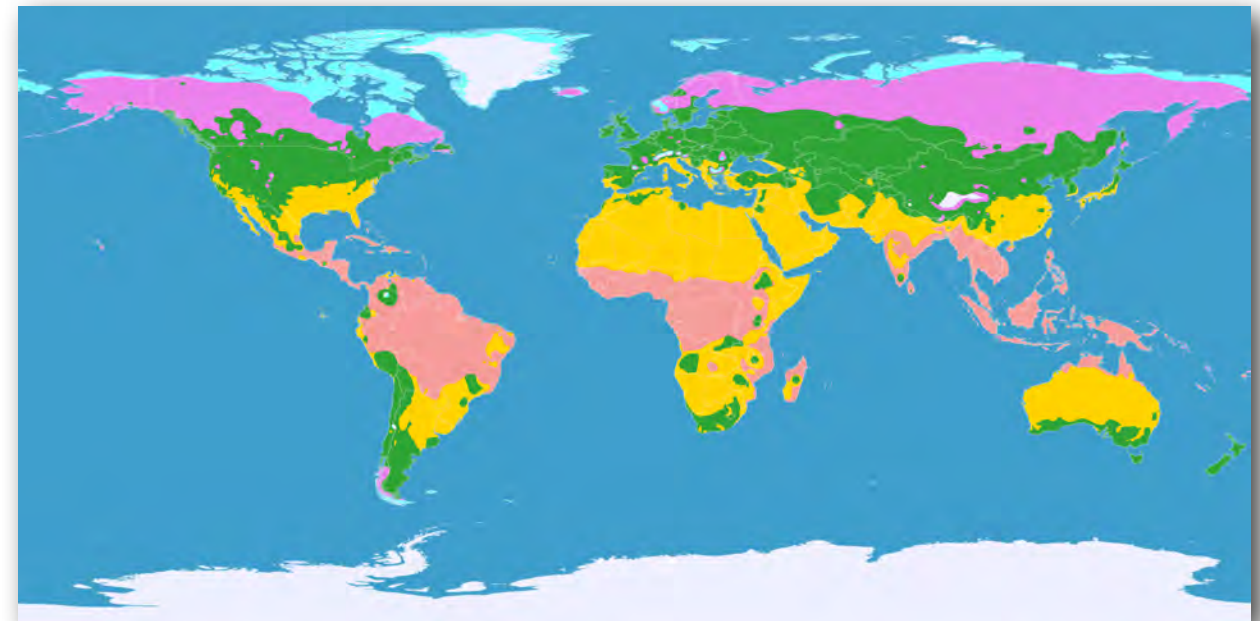


Image source: <https://upload.wikimedia.org/wikipedia/commons/5/58/Klimagürtel-der-erde.png>

1. What do central and northern Australia have in common with Northern Africa? What other parts of the world have similar characteristics?
2. What do the islands north of Australia have in common with central Africa and northern South America?
3. What parts of the world are similar to Southern Australia?

The Islands in the Pacific can be broken into three distinct regions. Of the three, Melanesia is the most populated.

Micronesia is made up of approximately 2,000 small islands and is located north of Melanesia. Polynesia is a collection of many islands just East of Melanesia and Micronesia. What do you notice about the shape of their zone?

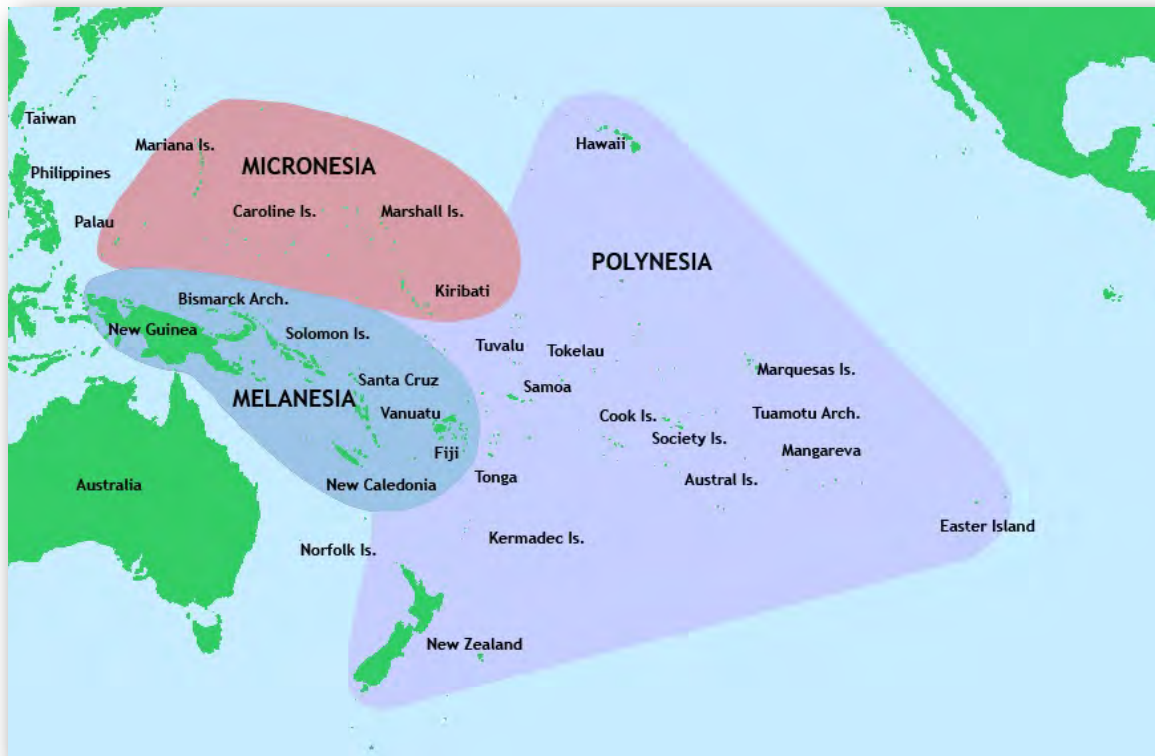


Image source: Image source: http://upload.wikimedia.org/wikipedia/commons/9/93/Pacific_Culture_Areas.jpg

The climate of this region is mostly tropical. There is heavy rain year round in the region, and two natural disasters routinely affect the region - volcanic activity and typhoons.

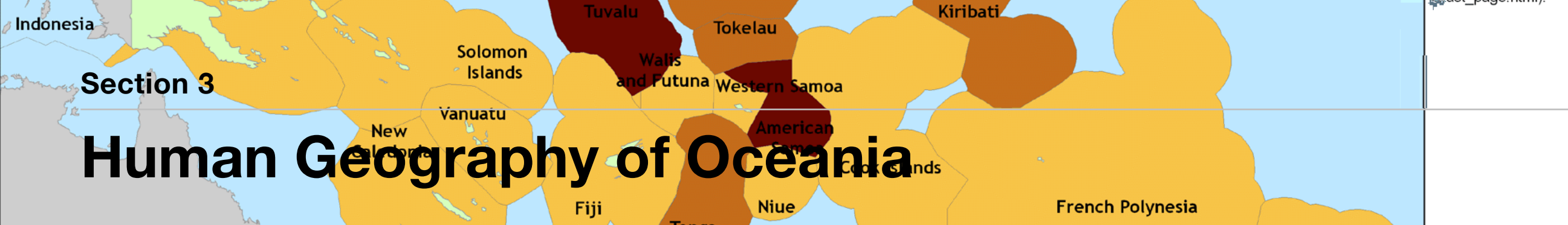
Resources in the area are vastly different depending on where you go. The islands that were formed due to volcanic activity are considered “high islands.” Due to the makeup of the soil (which is volcanic in nature) the people who live in these zones have fertile farmland where they grow things such as bananas, coffee, and cocoa (necessary for the creation of chocolate).

Interactive 8.2 National Geographic Explorer



To learn a little bit more about the physical features, and prepare for learning about the human features of Oceania, take a look at the National Geographic website here.

In contrast, the other islands are considered “low islands” which have little vegetation. You’ll learn a little more about the people in the next section, but there are very small populations of people on these islands.



QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?

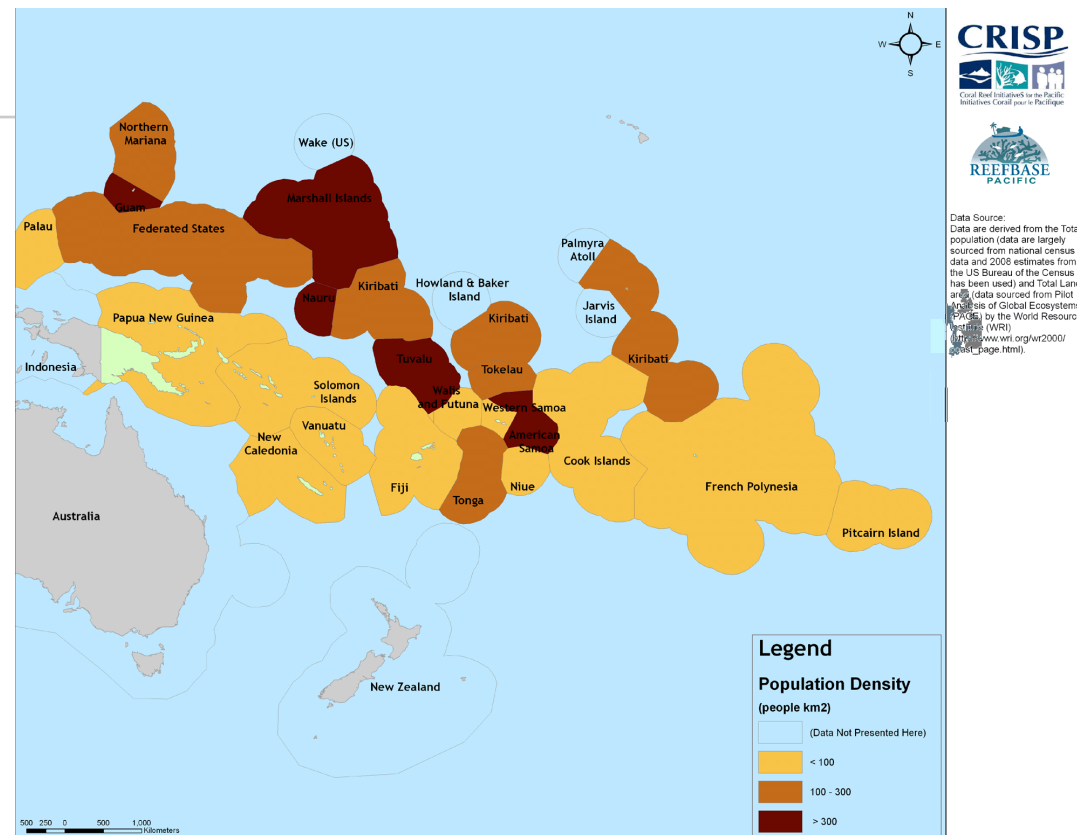


Image used with permission. Image source: http://www.reefbase.org/images/pacific/peoplereefs_figure3.gif

Oceania is a large region and as such there are a large variety of cultures represented. Overall, however, the entire region (including Australia) is very sparsely populated. Look at the population density map provided. This map from reefbase.org showcases the population density of most of Oceania. If the darker regions indicate areas with a heavier concentration of population than the lighter areas, does the region seem to have a large or small population? What evidence supports your claim?

Movement To The Region

There is much scholarly debate on when exactly the region began to be settled. Some claim people began making their way there 35,000 years ago. Others believe it happened later. It is believed the people of Polynesia arrived through one of three migrations:

1. An “express train” out of Taiwan. This is not a literal train, but rather a theory that people left quickly from southern China and made their way to islands such as Melanesia over a long period of time.
2. An “Entangled Bank” - a much slower migration out of areas such as Australia and southern China.
3. A “Slow Boat” - where people came to Melanesia, mixing and mingling with the populations there before moving out over a longer period of time.

All of these migrations took place over a long period of time - over several thousands of years. Because these civilizations were isolated from others however, the history and cultures in this region are distinctive and unique. Prior to contact with the Europeans, the people of this island region practiced hundreds of different religions, many with similar roots to one another. Much of this changed with the arrival of the Europeans.

Contact with European powers occurred in the 1500s. While not initially easy to get to and from Europe, the first European believed to have entered the region was Ferdinand Magellan who landed near the Philippines where he was eventually killed.

Further explorers came after him, including Captain James Cook who made three major voyages to the region and eventually explored the vast majority of it. The records of his journey inspired others back home in Europe to continue to investigate the region, and by the mid 1800s Spain, France, and Great Britain had all taken major stakes in the region.

Which theory on movement of people do you believe to be the most likely? Why?

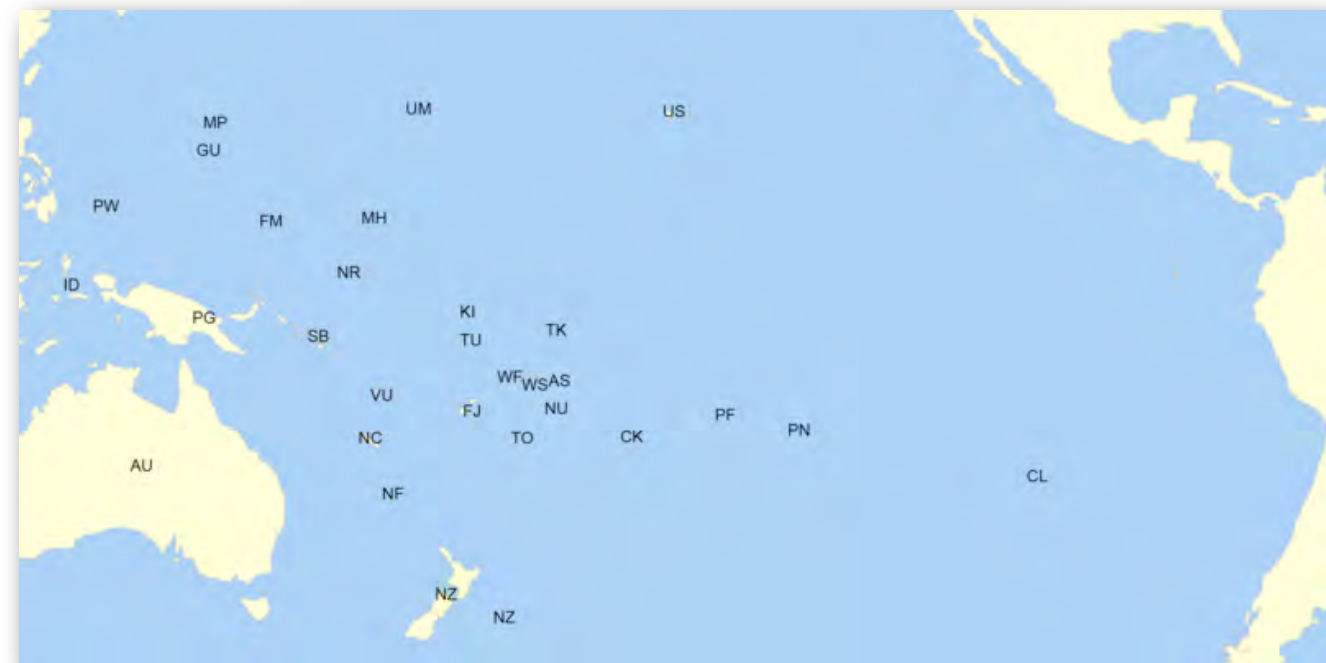


Image source: https://commons.wikimedia.org/wiki/File:Map_of_Oceania_country_codes.png

Even the United States has a stake in the area. When the United States went to war with Spain early in its history, the Spanish were eventually defeated. Guam became a United States territory during this period.

There are over 9 million people living in the overall region today. That seems like a lot until you compare it to a relatively large city in Mexico - Mexico City. 8.5 Million people live in that city alone!

There are many different cultural traditions in this region. While many adopted Christianity as a major religion which spread to the region through European contact and exploration, there are still places where traditional local religions are practiced. The Pacific Islands are one of the most isolated regions in the world, yet places there are heavily visited by tourists.

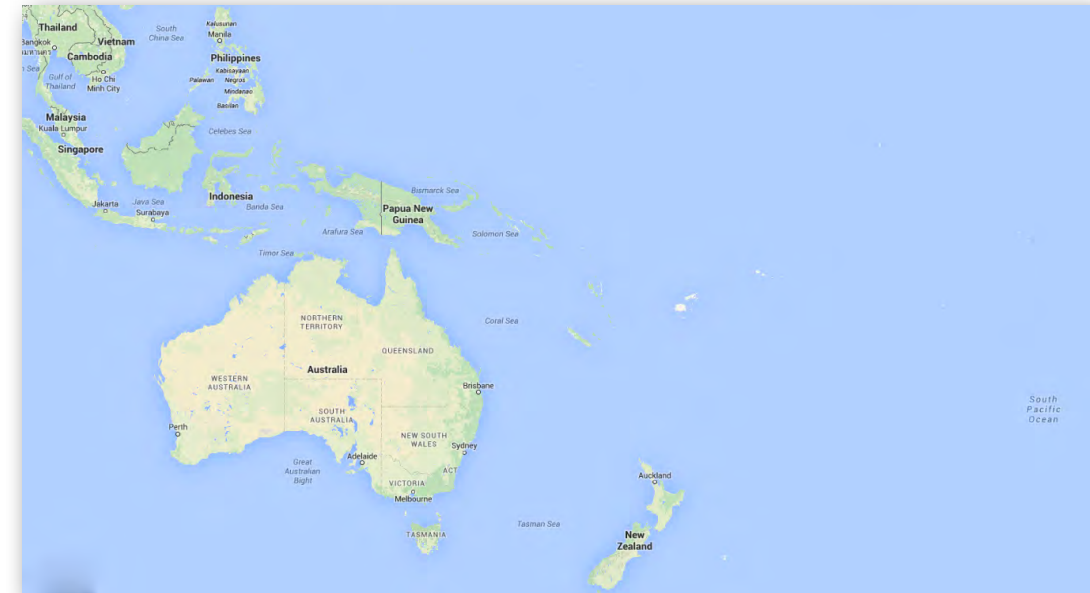


Image source: Image Source: <https://www.google.com/maps/@-13.1858046,175.1825482,9581953m/data=!3m1!1e3>

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Interactive 8.3 Culture Grams



After heading to the main page, select “Kids” and choose Oceania to drill down deeper into the region.

“How do people survive when surrounded by oceans?”

Looking at the region again again by viewing the map above, what might make up the economy of the region?

Visit the Culture Grams website (Only available to students in Michigan!) and look up the region to find more information and answer this inquiry question:

(Hint! Once you select your region, look on the left hand side of your screen to dial down into certain options)

Section 4

Introduction to Australia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: Image source - <http://www.deshow.net/d/file/travel/2008-11/sydney-scenery-australia-travel-2.jpg>

Australia

How does where societies develop influence their place in the world?

You cannot study the history of a place without looking at how geography has influenced a culture's development. This second question will be one you work cooperatively to answer with other classmates as you learn more about Australia.

Interactive 8.4 Australia - Introduction Quiz



Take the following quiz to see what you already know about this fascinating region.

Australia is a continent where you can find geographic extremes. It has both deserts and rainforests, and is home to the Outback and the Great Barrier Reef. This unique continent is surrounded by the Pacific and Indian Oceans. The continent is comprised of the mainland, Tasmania and several smaller islands. Australia is the 6th largest country in the world

where over 23 million people live today. In this chapter you will learn about the geography of this continent, along with the population and history of Australia. You will have a chance to explore how the population of this country grew and ways that this has shaped modern day life.

Interactive 8.5 Google Maps - Australia



Explore the region with this interactive online map. (Requires internet connection)

As you read these next sections, think about how where Australia developed influenced their place in the world. To get you to start thinking about this, watch this video and answer the questions in the blue box below:

Interactive 8.6 Australians as Global Citizens



1. How has Australia influenced the countries around it?
2. Why do people move here?
3. What sets Australia apart from other countries in the region?

Section 5

Physical Geography - Australia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: <http://www.ga.gov.au/images/GA1073.jpg>

Looking at the map of Australia, what do you notice? The lines dividing Australia, mark the six states and two territories: Western Australia, South Australia, Queensland, New South Wales, Victoria, Tasmania, the Australian Capital Territory, and the Northern Territory. Where do you see the majority of the cities in Australia? You will notice they are along the coastline. According to the Australian Bureau of

Statistics, more than 85% of the population in 2001 lived within 30 miles of the coast.

Why do you think that so many people live near the coast in Australia?

The Outback, found inland Australia, is difficult to inhabit due to arid weather and extreme heat. This land is not fertile, making farming nearly impossible for people and thus you will see fewer cities in the Outback.

Looking at Australia's vegetation, notice that more than 70% of Australia is arid or semi-arid. **Arid** means an area that has little or no rain, where it is difficult for vegetation to grow.

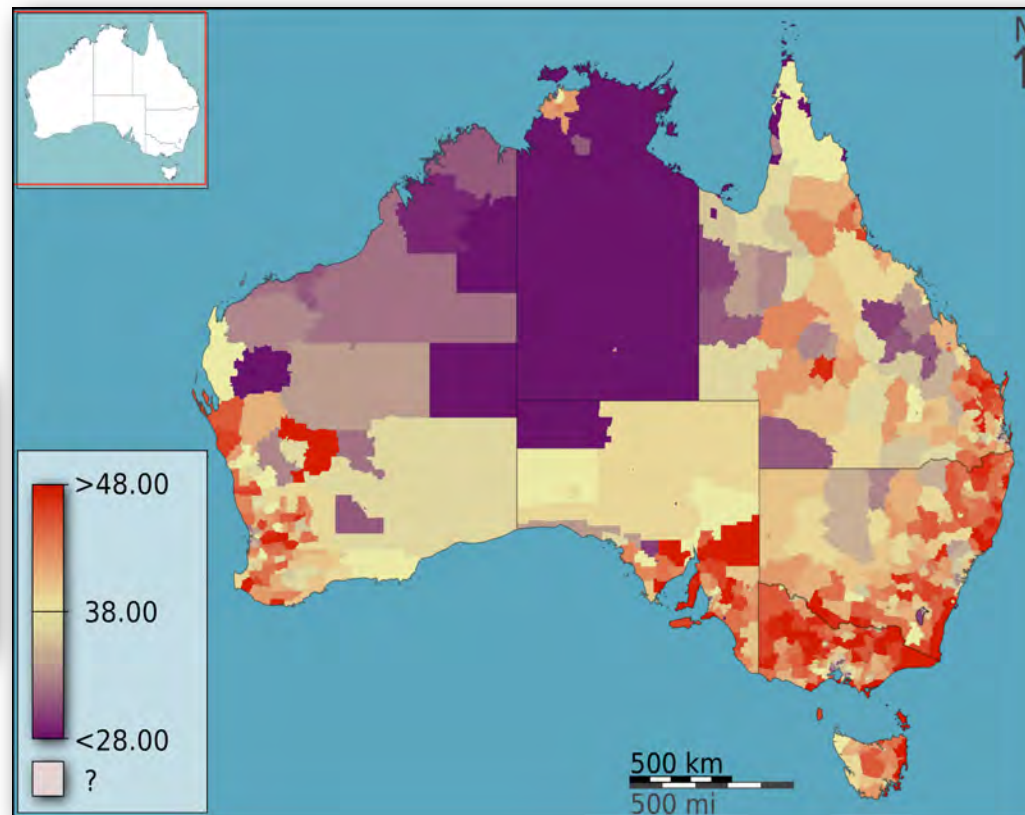


Image source: https://upload.wikimedia.org/wikipedia/commons/thumb/f/fa/Australian_Census_2011_demographic_map_-_Australia_by_SLA_-_BCP_field_0109_Median_age_of_persons.svg/2000px-Australian_Census_2011_demographic_map_-_Australia_by_SLA_-_BCP_field_0109_Median_age_of_persons.svg.png

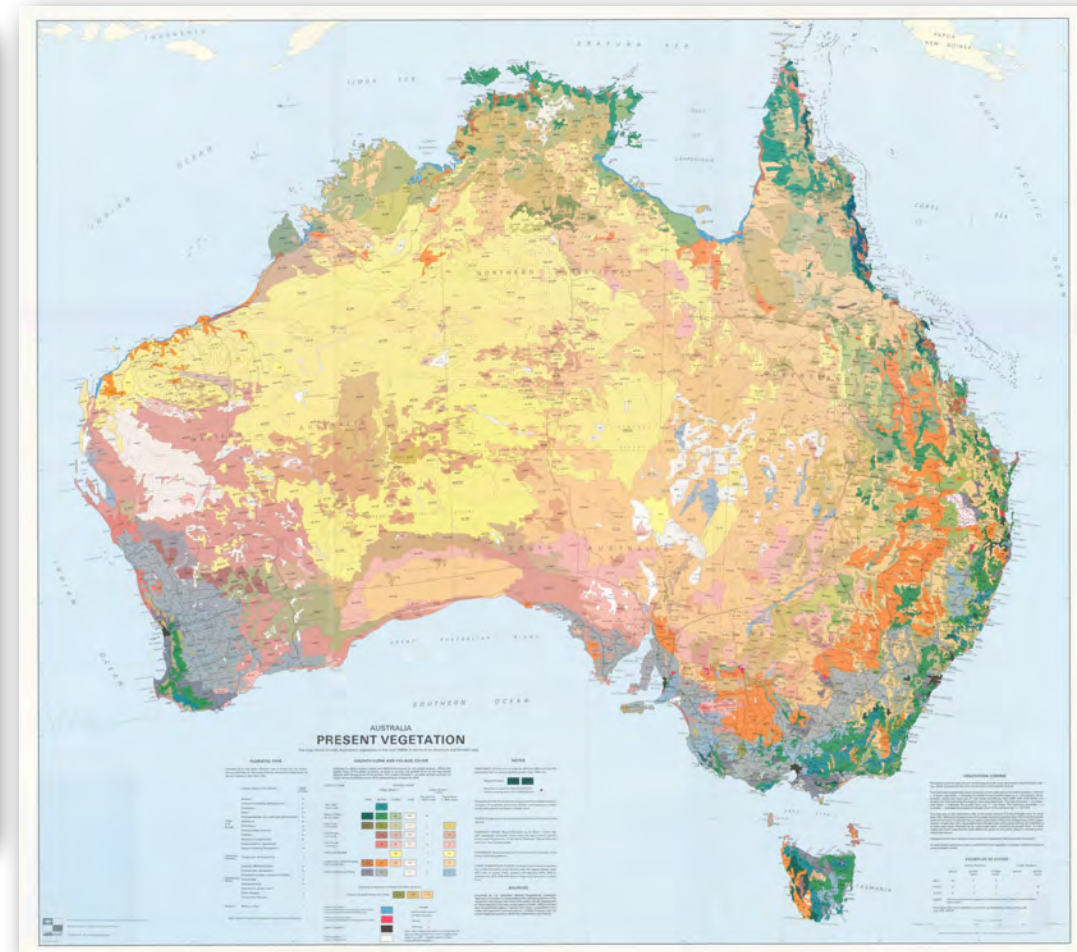


Image source: https://upload.wikimedia.org/wikipedia/commons/c/c5/Australia_Present_Vegetation_Map.png



Image source: https://upload.wikimedia.org/wikipedia/commons/f/f9/Ayers_Rock_Uluru.jpg

Although most Australians do not live in the Outback, it is a beautiful region and home to Ayers Rock (or also known as Uluru). This impressive landmark is an image people think of when they imagine the Australian Outback or desert. It is found in the Northern Territory in central Australia.

In contrast to Australia's Outback, this continent has rain forests as well as a world famous underwater habitat. The Great Barrier Reef is the world's largest **coral reef system**.

It is larger than the Great Wall of China and is the only living thing that can be seen from space.

The reef spans 2300 km - comparatively this would be equal to the distance from Vancouver, Canada to the Mexican border. This reef is home to thousands of species. It is home to over 1,625 types of fish alone!



Image source: https://upload.wikimedia.org/wikipedia/commons/6/62/Amazing_Great_Barrier_Reef_1.jpg

Interactive 8.7 Great Barrier Reef



Click on the link to experience what life is like on the Great Barrier Reef.

After learning about the geography of Australia, what does this country have in common with where you live? Australia is a top travel destination and the Great Barrier Reef and Ayers Rock attract many tourists. What natural geographic attractions do tourists enjoy visiting in Michigan? Image: Sleeping Bear Dunes.

You have learned that Australia is a land of geographic extremes. You probably do not live in a region of such extremes, but what do you notice about where people live in Michigan? Is there a pattern to where people live or where large cities are located? Remember that in Australia most people live near the coast because the large cities are able to sustain population, as opposed to the Outback.



Image source: https://upload.wikimedia.org/wikipedia/commons/3/38/Sleeping_Bear_Dune_Aerial_View.jpg

Human Geography - Australia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: [https://upload.wikimedia.org/wikipedia/commons/c/c7/Australia_Aboriginal_Culture_002_\(5447678025\).jpg](https://upload.wikimedia.org/wikipedia/commons/c/c7/Australia_Aboriginal_Culture_002_(5447678025).jpg)

Australia is home to over 23 million people today. Australia is one of the most ethnically diverse countries, where nearly 25 percent of people living in Australia were not born here. Thinking about this fact for a moment, what do you think brought all these people to Australia? Why do people still migrate, or move there?

We will be exploring the history of migration in this section and you will see there were some major events in Australia's history that pushed or pulled people to migrate there.

People native to this continent were known as Indigenous or Aboriginal people by the British when they came to Australia in the 18th century. Aboriginals are believed to have inhabited Australia for over 50,000 years. Aboriginals survived by using the resources in the area. They hunted, fished and gathered for their food. They were limited in their food choices by what the land and sea offered. Therefore, they were nomads and traveled in search of their food. When the British

came to Australia, they considered them illiterate and could not understand their nomadic culture.

When the British arrived, the people native to Australia were displaced, or forced to surrender their native lands to the British. They were now under British rule. In the years following British settlement, many Aboriginal people died from displacement, disease or violence. Racism towards Aboriginal or Indigenous Australians continued until well into the 20th century. Indigenous Australians were not given the right to vote until 1962. It was not until 1968 that the Australian government passed a law requiring employers to pay Aboriginal Australians minimum wage. The Aboriginal Land Rights Act in 1976 granted traditional land in the Northern territories to the Aboriginal people.

Interactive 8.8 Dreamtime story



Click on the link to listen to a traditional dreamtime story. Listen for the sounds of the didgeridoo at the beginning of the clip

Although Aboriginal Australians make up less than 3 percent of the population, the rich Aboriginal culture is something people hope to preserve. Originally there were between 350 - 750 different Aboriginal groups and languages. Their cultures was centered around nature and the importance of the land. The art created reflected the importance of Dreamtime, which was the period they believed when



Image source: [https://upload.wikimedia.org/wikipedia/commons/5/52/Aboriginal_Art_Australia\(3\).jpg](https://upload.wikimedia.org/wikipedia/commons/5/52/Aboriginal_Art_Australia(3).jpg)

the world was created. Dreamtime is reflected in both art and stories passed down through generations. Aboriginal art used symbols and drawings to tell a story and was first done in caves and on bark.

Interactive 8.9 Aborigines and Native Americans



Reading about the people native to Australia, you may have made some connections to people who were native to Michigan. The following article explores the similarities and differences between Australian Aborigines and Native Americans. After reading the article please answer

the questions below.

1. How are Australian Aborigines and Native Americans similar?
2. In what ways are their histories different?
3. Do you believe that a valid comparison can be made between these two cultures?
4. Why or why not?

Interactive 8.10 A Day in the Life - Australia



Is daily life in Australia different than where you live? Take a peek inside a day in the life of a 12 year old boy living in Australia. After you have looked at these slides, compare and contrast a typical day for you and the one you just saw.

History of Australia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?

Interactive 8.11 Australia Decides - Monarchy or Republic



History

Australia is an independent country, yet it is part of the British Commonwealth. This means that Australia shares a **monarchy**, a government ruled by a king or queen, with Britain. Thus, Queen Elizabeth II is Queen of England and Queen of Australia.

As you watch the video in the widget, be thinking about the following questions:

- What are some of the reasons people give for wanting or not wanting a republic?
- Why do you think some of them do not seem to understand the issue?
- What was the result of the referendum? Were there any positive outcomes?

To understand why Australia became a monarchy, we need to go back and look at how Australia was founded. This country has a rich history and in this section you will see the role that migration played in shaping Australia's history.

British Claim the Continent:

By the mid 1700's, England had an overcrowded prison system. The country was in need of sending its prisoners somewhere else. Near the end of the 1700's, British explorer James Cook came to Australia and claimed it for Great Britain. He named this land New South Wales. A few years later ships carrying nearly 1400 people, mostly convicts, from England landed in Australia. They arrived on January 26th, 1788. This day is now known as Australia Day, an official public holiday celebrated throughout Australia.

Population Growth:

Over the next 100 years, over 150,000 additional men and women were shipped to Australia. Most of these people were convicted criminals. They faced difficult and horrible conditions throughout their long journey on a ship. The removal of these convicts helped Britain with their



Image source: <https://upload.wikimedia.org/wikipedia/commons/7/76/Captainjamescookportrait.jpg>

overcrowding prisons as well as helping them settle Australia much faster.

Australia also experienced a population boom during the Gold Rush of the 1850's. Immigrants from around the world moved to

Interactive 8.12 A Land of Milk and Honey



Learn more about how migrants adjusted to life in Australia

Australia hoping to become rich with the discovery of gold. The population, however, was dominated by convicted criminals who recently had been sent from England. On January 1st the commonwealth of Australia was created as a dominion of the British Empire and Australia was a officially a new country.

1. What benefits for migrants did this video highlight?

2. Identify and list the problems for migrants shown in this video clip.

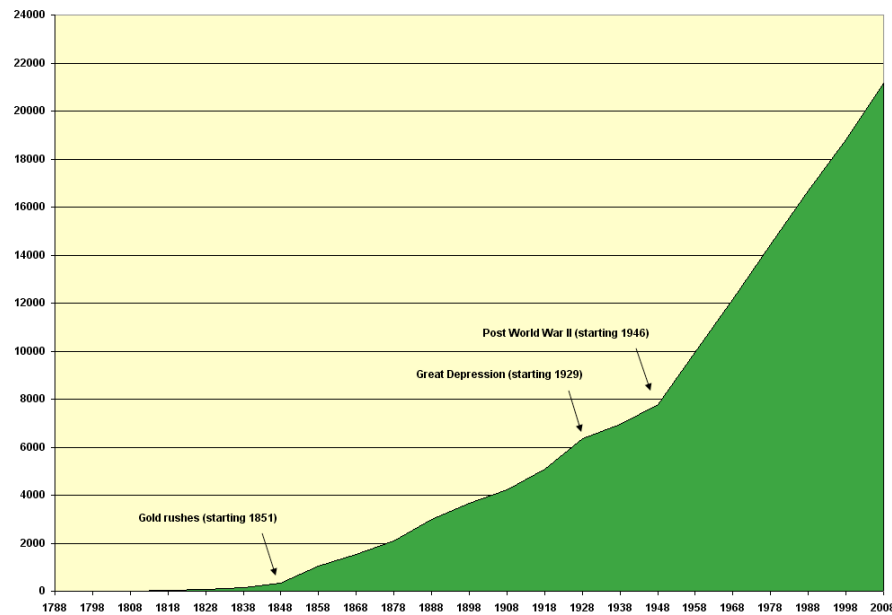


Image source: https://upload.wikimedia.org/wikipedia/commons/c/c9/AUS_population_development_1788_to_2008.png

Here is a look at the population growth of Australia. Australia's population boomed between 1948 and 1975 when over 2 million people migrated to this country.

Why do you think the population boomed after WWII in Australia?

What do you think happened to the population of Michigan and the rest of the U.S. after WWII? Why?

The economy was sparked by production for WWII and growth swept across Australia. Australia was in dire need of workers as industry grew rapidly. Migrants from Europe came to fill many of the needed positions. Most of the migrants were young and were very hopeful for a bright and profitable future. They were not disappointed. Watch the following video from 1951 that explained how migrants adjusted to life in Australia. Note that many people who migrated to Australia from Europe did not speak English.

Australia has a rich and diverse history. So now that you have explored Australia in greater detail, how are we, as members of a global society, connected to Australia? Open your interactive journal and answer the inquiry questions for this section.



Interactive 8.13 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

Introduction to Antarctica

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: https://upload.wikimedia.org/wikipedia/commons/8/8f/Fryxellsee_Opt.jpg

Antarctica is an extremely **desolate** place. It is the coldest, windiest, and driest place on the earth.

Antarctica is Earth's southernmost continent, containing the geographic South Pole. It sits in the Antarctic region of the Southern Hemisphere, almost entirely south of the Antarctic Circle, and is surrounded by the Southern Ocean. Just speaking the name of this continent brings up images of ice, snow and penguins.

Antarctica has a rich history of exploration and continues to be a thriving spot for researchers and scientists from all over the world. In this sections we will look at the physical features of this continent, along with the history and how it connects to the rest of the world. You will have an opportunity to look at images from this

frozen continent, watch videos taken in Antarctica and play interactive games that test your knowledge of Antarctica. This continent has often been referred to as the last frontier in exploration and is extremely important in the scientific community today. As you read and explore, think about how are we, as members of a global society, connected to Antarctica? Also, think about how the history of Antarctica impacts the role it plays in the world today?

Interactive 8.14 Google Maps - Antarctica



Study the region by exploring on this Google Map.



Image source: https://upload.wikimedia.org/wikipedia/commons/9/93/Antarctica_major_geographical_features.jpg

Section 9

Physical and Human Geography

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: https://upload.wikimedia.org/wikipedia/commons/9/93/Antarctica_major_geographical_features.jpg

Movie 8.1 Visual Loop - Antarctica



Video Questions:

1. Describe what Antarctica is like compared to where you live. (weather, land, number of people, activities)
2. Based on what you see, why do the physical features make it difficult for people to live in Antarctica?
3. Why might countries from around the world be interested in Antarctica?

Antarctica is the world's fifth largest continent. It is slightly less than 1.5 times the size of the U.S. and about twice the size of Australia. Antarctica has an area of 14 million squared kilometers. Antarctica's landscape is made up of approximately 98% thick continental ice sheet and 2% barren rock. There are numerous ice shelves in Antarctica. An ice shelf is a thick floating platform of ice that forms where a glacier or ice sheet flows down to a coastline and onto the ocean surface (wikipedia). On this continent, glaciers form ice shelves along about half of the coastline, and floating ice shelves constitute 11% of the area of the continent.

Antarctica, on average, is the coldest, driest, and windiest continent, and has the highest average elevation of all the continents. Antarctica is considered a desert, with annual precipitation of only 200 mm (8 inches) along the coast and far

less inland. The temperature in Antarctica has reached -89°C (-129°F).

The South Pole, the southern most point of the Earth, is located in Antarctica. The Transantarctic Mountains go through this continent. Explorers trying to reach the South Pole by way of the Ross Ice Shelf had to

Interactive 8.15 Antarctic Ice Shelves



Learn more about the dangers facing the Antarctic Ice shelves in this video.

cross this mountain range.

Wildlife and Vegetation

This beautiful, icy ocean environment is also home to nearly 10,000 highly adapted species, many of which can be found nowhere else on the planet. Only cold-adapted organisms survive, including many types of algae, bacteria, fungi, and plants, and certain animals, such as mites, penguins, and seals.

Gallery 8.1 Wildlife and Vegetation in Antarctica



One of the author's friends works in Antarctica and provided these still images.

1 of 12

Antarctica is one of the most pristine marine environments on the planet. Vegetation where it occurs is tundra.

Human Geography

Although there are no people native to Antarctica, anywhere from 1,000 to 5,000 people reside throughout the year at the research stations scattered across the continent. Most residents of Antarctica live there for a few months at a time and it is important to keep in mind that there are no permanent residents or cities or towns in Antarctica. “There are around 66 scientific bases in Antarctica, of which about 37 are occupied year round. There are about 4,000 people through the summer months and about 1,000 over winter each year. Antarctica boasts tens of thousands of tourists each year. In 2013-14 Antarctica had 37,405 tourists.” (IAATO, 2014).



Image source: https://upload.wikimedia.org/wikipedia/commons/7/79/South_pole_skiers.jpg

History

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How does where societies develop influence their place in the world?
3. How do people survive when surrounded by oceans?



Image source: [https://upload.wikimedia.org/wikipedia/commons/1/1e/Iceberg_in_Paradise_Harbour,_Antarctica_\(6087919256\).jpg](https://upload.wikimedia.org/wikipedia/commons/1/1e/Iceberg_in_Paradise_Harbour,_Antarctica_(6087919256).jpg)

Global Connections

So who was the first person to see this beautiful and desolate continent? When was Antarctica discovered? In 1820, several groups of explorers claim to have sighted Antarctica. American Captain John Davis claims to be the first to set foot there in 1821. Davis was a sealer, a person who hunts seals. Sealers hunted seals for their pelts and fat, which could be made into lubricants, lamp fuel or cooking oil. In 1911, Norwegian explorer, Roald Amundsen's expedition was the first to reach the South Pole.



Image source: https://upload.wikimedia.org/wikipedia/commons/2/2d/Aptenodytes_forsteri_-Snow_Hill_Island,_Antarctica_-juvenile_with_people-8.jpg

Imagine you were a part of an expedition to discover the South Pole. Write a letter home describing what this journey is like.

Interactive 8.16 Is Antarctica Melting?



Click on this link to read about what is happening to cause a change in ice mass.

below to read about what is happening to cause a change in ice mass to this continent.

Why are countries interested in Antarctica?

Even though Antarctica is an extremely desolate and difficult place to live, there are many natural resources that make it very financially attractive for many countries. Petroleum, coal, ice, copper, and iron are just a few of the many natural resources available in Antarctica. However, the harsh climate, thick ice and short work season make it very difficult to retrieve any resources. Many believe that as resources are depleted worldwide, economic pressure will force mineral and petroleum

Antarctica Ice Melt

98% of Antarctica is covered in ice. The ice averages a little over a mile thick.

Is Antarctica melting? We hear a lot about global warming these days. But is it really happening? Click on the link

exploration into more and more remote regions as resources are gradually depleted in other lands. If this happens, it could destroy one of the last untouched areas on our Earth. What is being done to protect it?



Image source: https://upload.wikimedia.org/wikipedia/commons/0/0b/Antarctic_Region.png

Who Owns Antarctica?

Looking at the claim map, what countries maintain a territorial claim in Antarctica? Which country holds the largest claim?

You may be wondering why don't you see the United States name on this map. The United States does not hold a claim but does reserve the right to make a claim in the future.

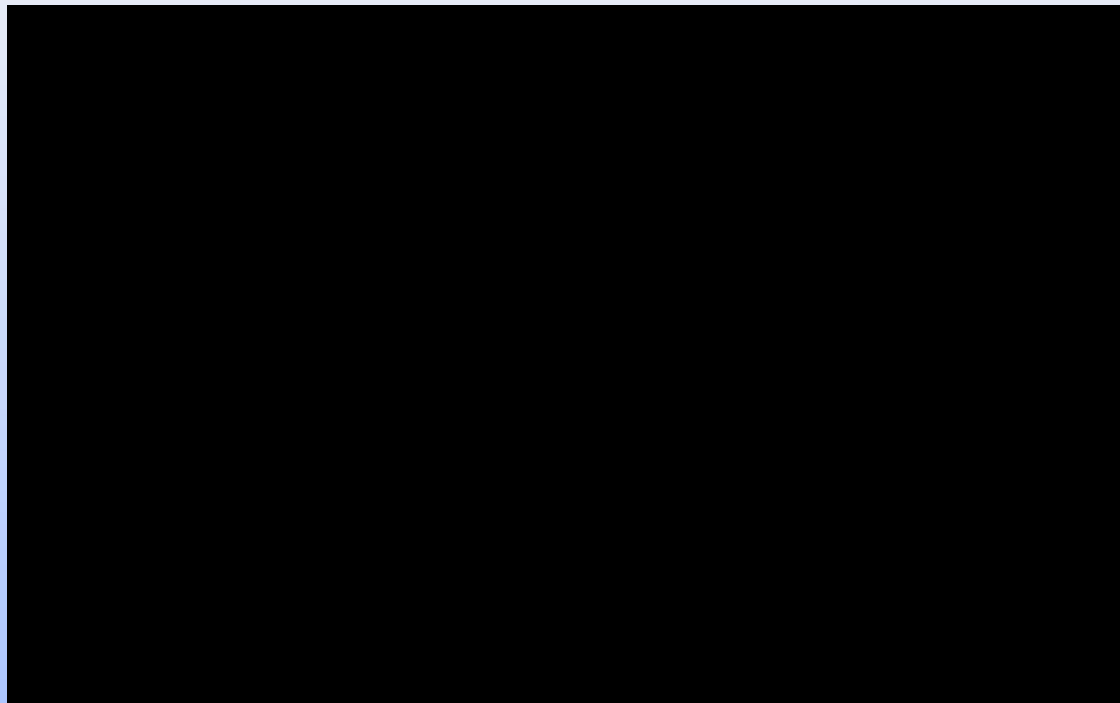
Territorial claims were claims on the land made by different countries. The Antarctic Treaty was created in 1961 but neither

denies nor recognizes these claims.

What is the Antarctic Treaty?

The Antarctic Treaty was signed December 1, 1959 in Washington, D.C., and was entered into force on June 23, 1961. The objective of this international agreement is "to ensure that Antarctica is used for peaceful purposes, for international cooperation in scientific research, and does not become the scene or object of international discord."

Movie 8.2 Go South



Courtesy, 2041

The Protocol on Environmental Protection to the Antarctic Treaty was signed in Madrid on October 4, 1991 and entered into force in 1998. It designates Antarctica as a “natural reserve, devoted to peace and science”, establishes the principles pertaining to human activities in Antarctica and prohibits all activities relating to the exploitation of mineral resources, except for scientific research.

The current moratorium that bans drilling and mining in Antarctica can be reviewed after the 50-year anniversary of the ratification, which will occur in 2048. What is being done today to insure that this treaty will continue?

What is 2041 and Who Is Robert Swan?

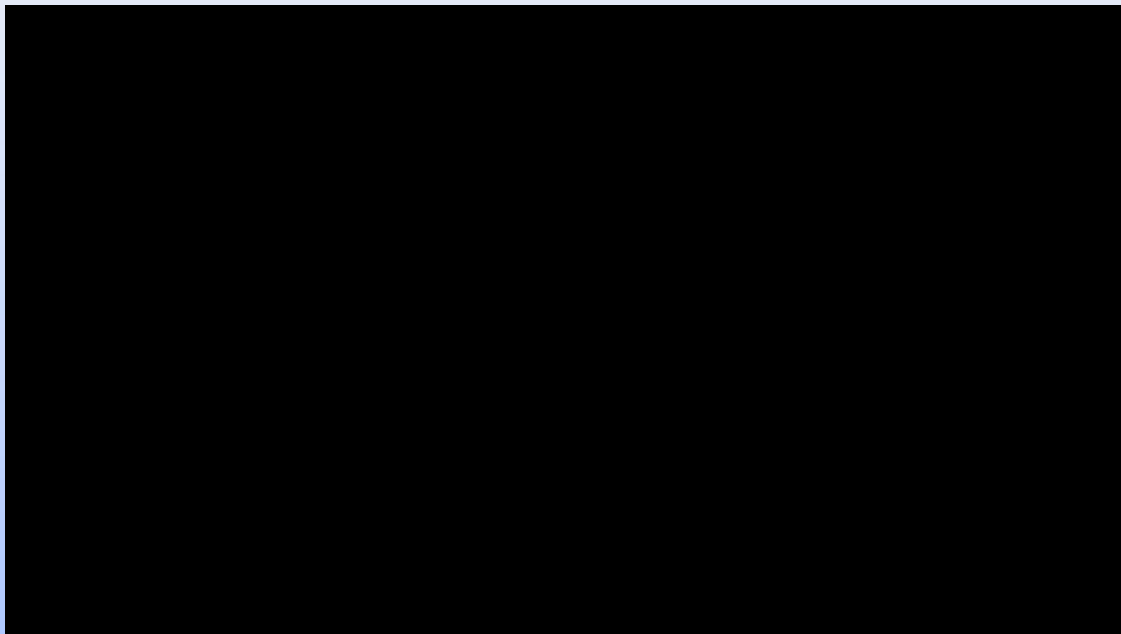
“The greatest threat to our planet is the belief that someone else will save it.” - Robert Swan

2041 was founded by polar explorer, environmental leader and public speaker Robert Swan. Robert’s goal is to increase awareness now and garner support by the year 2041 (the 50-year anniversary of the signing of the Antarctic Treaty) to ensure the continued protection of the Antarctic Treaty so that the last great wilderness on earth is never exploited. 2041’s mission is to build on Swan’s dedication by informing, engaging and inspiring the next generation of leaders to take responsibility, to be sustainable, and to know that now is the time for action in policy

development, sustainable business generation and future technologies.

As the first person in history to walk to both the North and South Poles, Swan has dedicated his life to the preservation of Antarctica by the promotion of recycling, renewable energy and sustainability to combat the effects of climate change.

Movie 8.3 Tetrapak in India



Courtesy, 2041

Video Questions:

1. What are people doing around the world to help preserve this Earth?
2. What can we do to help preserve Antarctica?

Global Connections

Why is Antarctica Important?

Wendy Gideman is a teacher in England and has been on two trips to Antarctica. She has blogged about her trip and set up a site with information about the beautiful continent. The following activity that she has created on her site contains a lesson about the global impact of humans on Antarctica and the importance of doing our part to preserve it for generations. Please take a few minutes to read her ideas: <https://sites.google.com/site/frozenclassroom/journal-blog/lesson-7--environmental-issues>

What are some things you can do to help preserve our World?

- Recycle and reuse things instead of throwing them in the garbage
- Turn off lights when you leave a room
- Don't leave the water running
- Keep learning about the environment and as you learn, apply your new knowledge to help the environment and Antarctica!
- Tell your friends and continue to pass along accurate and informative information
- Reduce the use of paper
- Reduce use of bottled water
- Compost
- Exercise, study, or work outside or in areas that do not need electricity
- Eat at restaurants that source local produce
- Avoid businesses/products that use harmful tactics or practices
- Be active in public sustainability forums and then share acquired knowledge

You have taken a tour of Antarctica and learned about the physical and human geography. Now take what you learned and answer the inquiry questions in your journal:

How does the history of Antarctica impact it's role in the world today?

How are we, as members of a global society, connected?

More web resources:

[http://
classroom.antarctica.gov.au](http://classroom.antarctica.gov.au)

[https://sites.google.com/site/
frozensclassroom/](https://sites.google.com/site/frozensclassroom/)

Interactive 8.17 Interactive Journal



Please note: once you have created your own copy of this document, this widget will only return you to the blank copy. You will need to access yours by opening from your own Google Document.

Themes In Action -East and South East Asia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

Location



QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

Movement

How do we move from place to place?
How do ideas move from place to place?
How do products move from place to place?



Regions

What region do we live in?
What are a region's characteristics?
What type of region is it?
What makes a region?



Human/Environment Interaction

How have we adapted to or changed our landscape?



Location

Where are we?
Where is a place?



Place

What kind of place is it?
What is it like there?



In the first six chapters of this book you studied a theme of geography and how it related to the region under study. In the last two chapters of this book you studied multiple themes and how they related to the regions. In this final chapter of the book you will put all five themes into practice by studying the most populous of the continents - Asia.

More specifically, you will study the themes in practice in East Asia, which includes large countries in terms of land mass and population such as China and Mongolia, as well as smaller nations such as North and South Korea and Japan.



image source: <http://www.iu.edu/~iaunrc/sites/default/files/lat-long%20map.jpg>

Where is it?

Take a look at the map above. Two prominent Asian countries are circled in blue. Using your knowledge of latitude and longitude, describe where China and Mongolia are.



Image source: http://www.jrank.org/history/article_images/Asia_p96_2.jpg

China and Mongolia are only two countries in Asia however, depicted in the map above are three more. Using your knowledge of latitude and longitude, describe where Japan and the Koreas are located.



Image source: http://www.theodora.com/maps/new3/eurasia_color.gif

Now think beyond longitude and latitude. Using the map above as well as the previous ones, describe where China, Mongolia, Japan, and the Koreas are. Are you taking into account the bodies of water that you can see on the map? What about physical features such as mountains?

The map above is at a larger scale than the previous. It showcases the region under study in terms of several other areas that you have already spent some time learning about. Africa is clearly labeled on the map, but above the blue circle is Russia. What lies to the west? Describe East Asia's location using the map above.

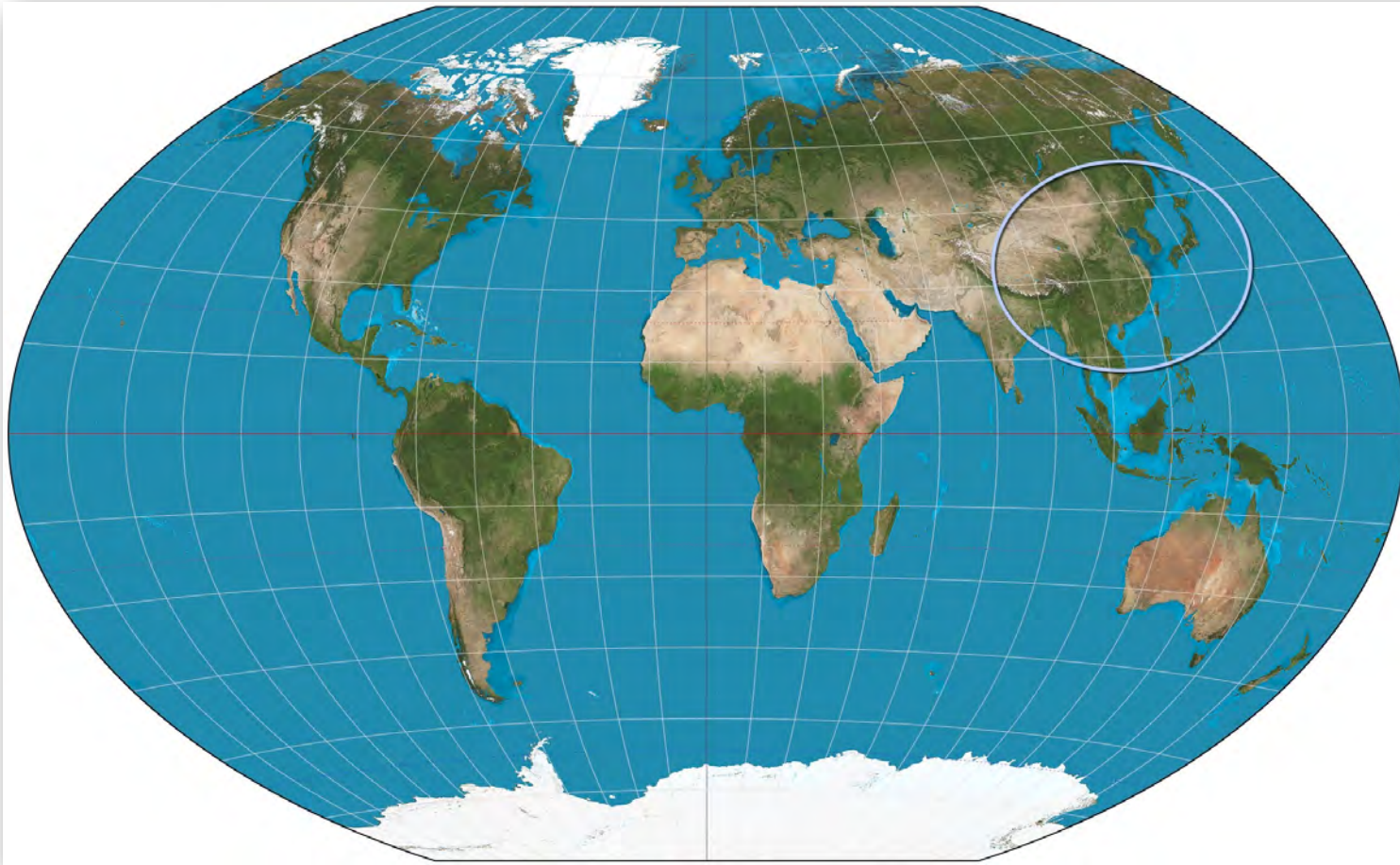


Image source: https://upload.wikimedia.org/wikipedia/commons/9/91/Winkel_triple_projection_SW.jpg

Finally, If you view the region in terms of its location on a world map, what do you notice about its relative size, its relationship to other regions you have studied this year, and its similarities in terms of latitude and longitude to other regions?

Write a brief paragraph describing where East Asia is located.

You may use any of the notes you have taken regarding location in this region so far.



Section 2

Place

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

When studying this region it is difficult to call attention to one defining characteristic. To answer the geographic question of “What is it like there?” you need to focus in on certain countries to get an answer. This is a region that has a little bit of almost everything.

China for example borders the region identified earlier as South Asia with the Himalayan mountains. You may recall that the Himalayas contain the world's highest peak - Mount Everest. Travel north from South Asia into China through the Himalayas and you'll reach what is sometimes referred to as the “roof of the world”, the Plateau of Tibet. With an elevation over 13,000 feet, this is the world's highest plateau.

If you move further north and east you'll end up with another answer to the question of “What is it like there?” The Gobi Desert occupies much of Mongolia. It is over 1,000 miles long and is the fifth largest desert in the world.

Think back to the chapter on Northern Africa. What is it like in the Sahara Desert?



Image source: https://en.wikipedia.org/?title=Gobi_Desert#/media/File:Gobi_desert_map.png

If you have studied the Sahara desert you might be surprised to learn that not all deserts share the same characteristics. The Gobi is a very cold desert. Because it is a higher elevation, as well as much farther north of the Equator than the Sahara, the temperatures are much lower. Sometimes the differences in temperature within a 24 hour period of time can be as much as 63 degrees!



Image source: https://en.wikipedia.org/wiki/North_China_Plain#/media/File:ChinaGeography.png

Travel further east and you'll hit the North China Plain. Due in part to how close several important water supplies are, including the Huang He (Yellow river) and the Chang Jiang (Yangtze river) much of China's population is located in this region.

Given what you have already studied about where civilizations tend to arise, make a prediction: Where do you believe most of the population concentration is in this area?

Moving further east into the East China Sea you'll travel across it and reach the Korean Peninsula and the islands that make up Japan. Mountains cover almost 75% of the Japanese islands. The climate in the northern part of Japan and much of the Korean is similar. Generally the summers are cool and the winters very cold. Further south however the winters are milder and the summer hot.

Much of the Korean peninsula is also made up of mountains. The Korean also have large plains found along the western coast. There are more rivers in Korea than in Japan.

While discussing the location of the region you might be able to say: "It is north of the Equator" and "Above the Tropic of Cancer", what it's really like there depends on many of the physical characteristics discussed already.

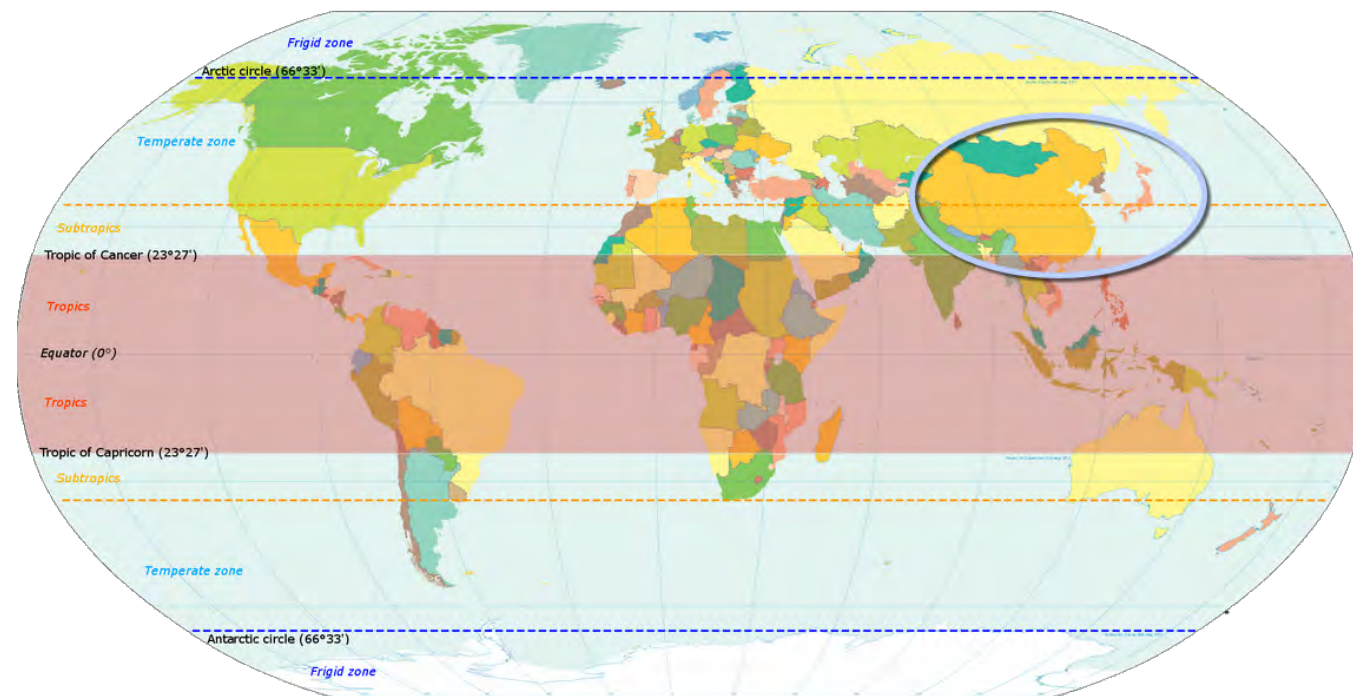


Image source: https://upload.wikimedia.org/wikipedia/commons/b/b0/World_map_indicating_tropics_and_subtropics.png

Activity: Take one of the countries discussed in this section and use CIA Factbook to try and answer the question "What is it like there?" Discuss your answer with a classmate.

What is it Like There?

As you may have guessed, to answer the question "What is it like there?" depends entirely on where you go in the region.

Regions

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

What is a region's characteristics? You have already learned that it is sometimes difficult to classify a region as a region. All classifications are labels which mean different things depending on your perspective. Typically the world has been classified in a "Eurocentric" way.

It is even more difficult to classify Asia as a region on its own due to the physical and human diversity of the region. Russia is part of Northern Asia, but the sheer size of that country also places it in Eastern Europe. India is part of Southern Asia. That region can be partially categorized by the mountain ranges that run through it.

The Asian continent cannot be easily labeled by climate, or physical characteristics. It contains both the highest and lowest points in the world. Depending on the location, the land could range from rugged and inhospitable to fertile and suitable for farming.

It is also difficult to label the region based on human characteristics. The region contains multiple forms of government, multiple religious practices, and many distinctly different cultural characteristics. Over time many of these have blended (particularly religion and certain cultural characteristics which you'll learn more about in a later section) but the people living in Asia are all distinctly different from one another.



Image source: https://upload.wikimedia.org/wikipedia/commons/0/08/Eurasian_mass.jpg

Using the map above, where would you mark the division between Europe and Asia? Explain why.

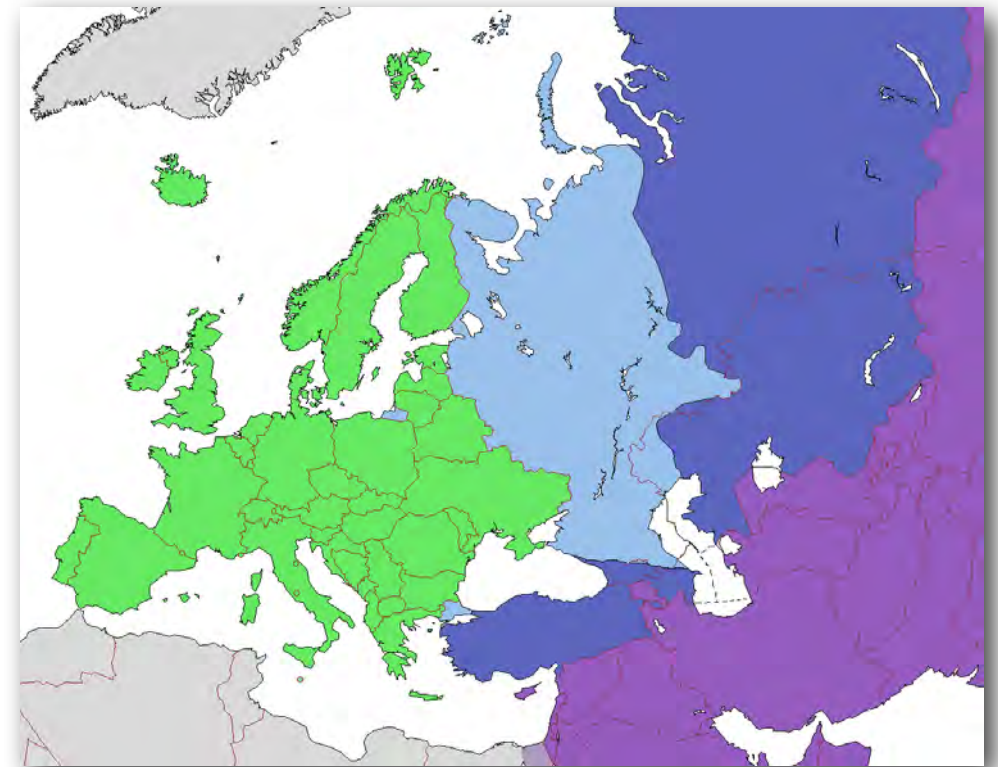


Image source: https://en.wikipedia.org/wiki/Boundaries_between_continents#/media/File:Europe_Asia_transcontinental.png

It is generally considered that there is an imaginary border between Europe and Asia which separates one continent into two. This line runs along the Ural mountains. To the south of the Urals, it generally follows major river and mountain ranges, though even this division is difficult to make.

Once you finally have Asia sectioned off, look once again at some of the regional divisions you have already studied in this book.

Explain why it can be difficult to label a region.



Image source: http://www.indiandefencereview.com/wp-content/uploads/2012/02/South_Asian_Region.jpg

On this map you studied the region labeled “West Asia” in the chapter on North Africa and the Middle East. Northern Asia and Central Asia was addressed in the Europe and Russia chapter. Southeast Asia was covered in Oceania. East Asia as depicted on this map utilizes both mountain ranges and physical country borders to finally receive a label “East Asia”

How else might you regionally label East Asia?

Human/Environment Interactions

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

In several other chapters you have already explored the theme of Human/Environment interaction. The question geographers ask in studying this theme is “How do we adapt to and change the environment?” All across the globe humans have modified and changed the environment to make things suitable for people to live. The people living in Eastern Asia are no different.

In this section you will learn about how people live in the Gobi Desert regions of China and Mongolia. You will also learn about the Three Gorges Dam and some of the environmental risks and benefits that this massive project has created.

The Gobi Desert - From Deforestation to Reforestation



Image source: Shutterstock, Murosvur

Over one thousand years ago, small collections of walls were fortified to create the “Great Wall of China” which served to protect the country from outside invaders. This same idea is now being utilized to protect the natural resources of the country to halt the spread of the desert and eventually reclaim the land that has been lost to the desert.

Every year the Gobi Desert expands, and this expansion threatens farmland in China and Mongolia. This has far-reaching effects far beyond these two countries. The main cause of this problem is similar to problems found in other large desert regions in the world, including the Sahara. Overgrazing, deforestation, and farming practices all contribute to the spread of this desert.

The problem doesn’t just affect China. The spread of the Gobi Desert and the deforestation of the country has led to what is known as “Yellow Dust Storms” as far away as the Korean Peninsula. The storms are occurring with increasing frequency, carrying dust and toxic inhalable substances from mainland China and Mongolia up the Korean Peninsula. These storms can also last several days.

Because of this the storms have a negative effect on both the personal health and well being of Korean citizens, as well as the economic health of the country. Learn more about the Yellow Dust Storms in the widget on this page.

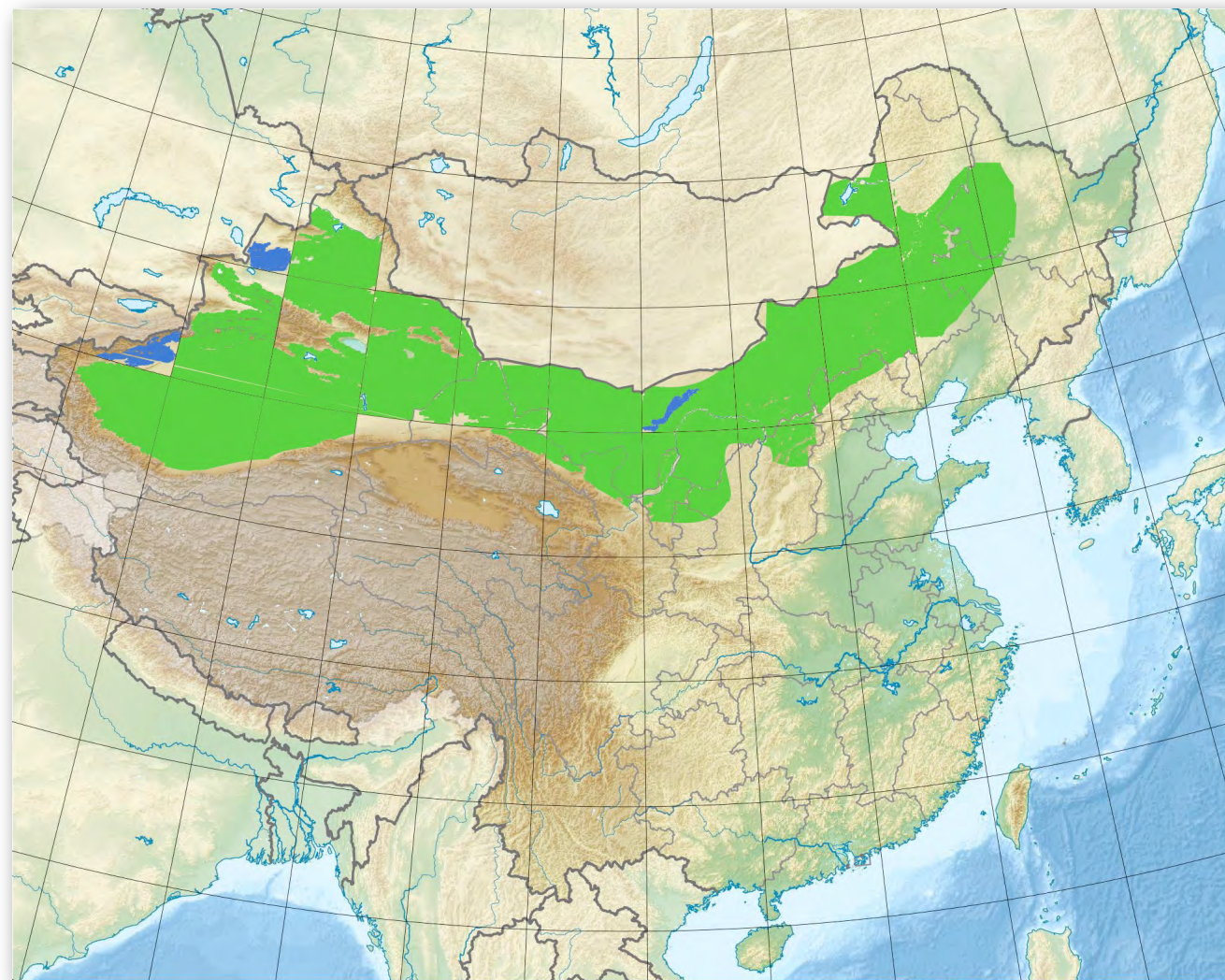
Interactive 9.1 Yellow Dust Storms



Learn more about the Yellow Dust Storms in this video from CNN

Question for consideration: Is finding a solution to this issue a global concern? Why or why not?

The proposed solution is called the Three-North Shelter belt Program or the Green Great Wall of China, widely believed to be the largest ecological project in history. Trees are being planted - more than 9 million acres of forest, to help stop the desert from spreading further. The term for this is known as **Reforestation**. This will not turn back the desert overnight, but is part of a long term strategy to help cut off the effects of the expanding desert



over time. The government of China is calling the project a success, though critics worry that without the ability to bring water to all of these trees it might not be a viable long term fix.

Even though the project will not stop the desert's expansion, or the yellow dust storms in the Koreas by the time you wake up tomorrow, China has reported that the project has improved the vegetation in the Green Wall region. In the future, this sustainable project could lead to the increase in available farmland and serve as a place for the large population of China to expand. The Green Wall, if successful, may also be able to help other regions of the world, particularly North Africa, in combating similar problems.

Three Gorges Dam

As the economy and population of nations grow one of the problems they face is how the country is powered. You've already learned about how the Green Wall of China has helped stem the problem of desertification, but another large scale project undertaken by the government has helped with the problem of providing energy for the country. In December of 1994 construction began on one of the largest scale dam projects in the world. In the hopes of harnessing the power of hydroelectric energy, energy created from the movement of water,

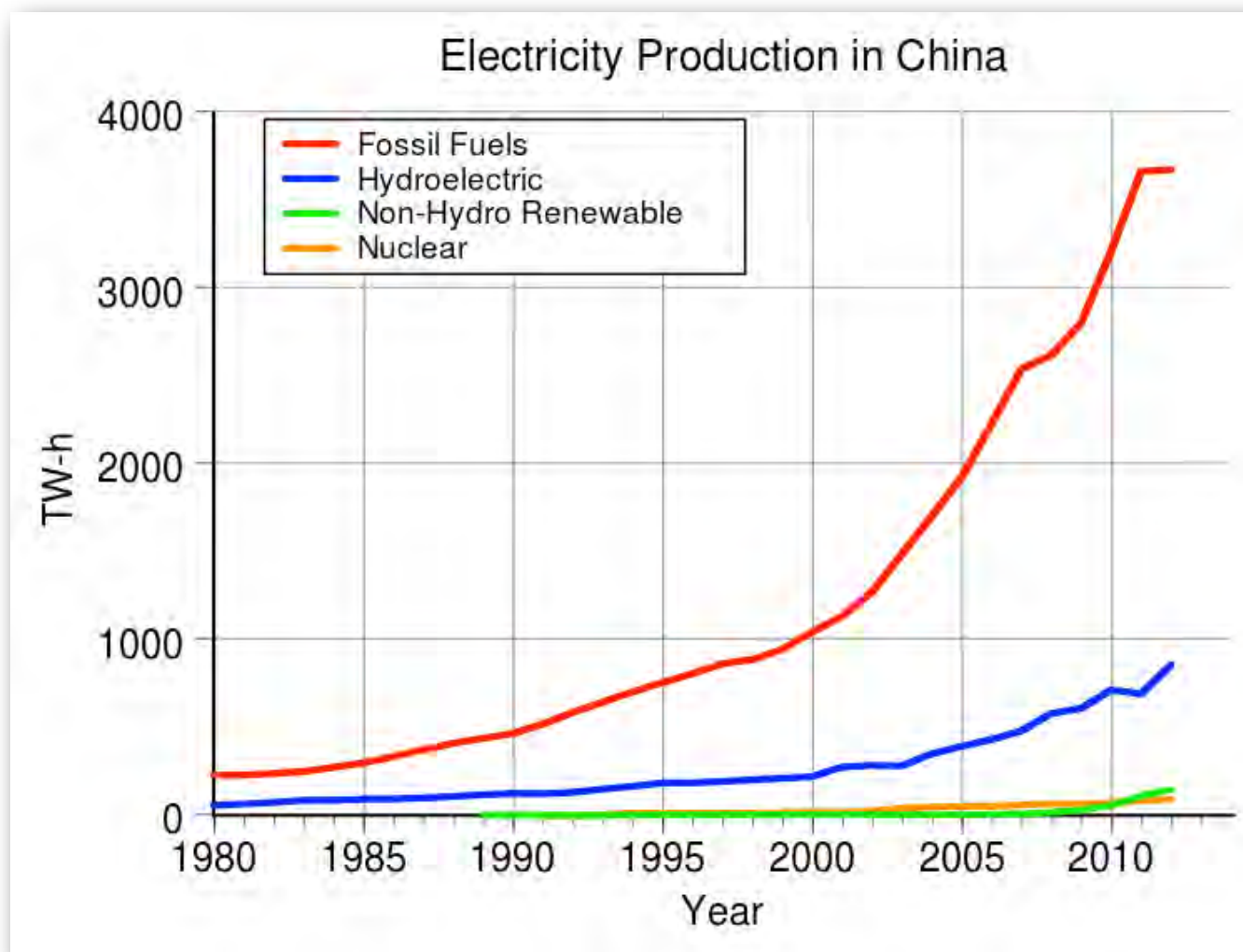
the Three Gorges Dam was envisioned and created. Brought online in 2006 and finally completed in 2014, the dam has helped solve energy and transportation problems. Critics of the project worry that the environmental impact of the dam could offset the benefits.

The graph on this page shows historical information in the production of energy in China. Like many countries China relies heavily on fossil fuels to power the country, but hydroelectric energy use is on the rise, partially due to the creation of the Three Gorges Dam. It will take a long time for the blue line on the chart to overtake the red line, but significant progress has been made since the dam became operational in 2006.

The dam project cost \$22.5 billion dollars to complete, and consists of 32 main generators which continue to create power. The cost of the project is expected to be recovered through energy creation by the mid 2020s.

From an economic standpoint the Three Gorges Dam is about more than just energy creation. The dam is intended to increase the shipping capacity on the Yangtze river by allowing travel both upstream and downstream.

All of these benefits have come at more than just a financial cost. 1.3 million people were forced to move away from their homes along the river due to the construction of the dam. Because the dam creates a barrier in the river, many species of



fish will not be able to travel upstream to spawn. It is believed that the population of these species will decrease. The project destroyed many communities forcing the people to relocate.

The reservoir for the dam ended up creating a lake. The water began to erode away the land around and underneath the affected area which resulted in landslides, many of which displaced more people and killed others.

The reservoir also sits on two major fault lines. The strain from a dam built in America in the 1950s and 60s along a similar fault line caused a large number of earthquakes. The filling of the reservoir is widely believed by scientists to be the cause, and while the Three Gorges Dam has, as of 2015, experienced small tremors, people are worried that the occurrence of larger ones are only a matter of time.

Interactive 9.2 Trouble for the 3 Gorges Dam



Watch this video describing some of the problems with the Three Gorges Dam: <https://www.youtube.com/watch?v=YtgOntg0ofc>

The dam has also resulted in lower water levels in other parts of the country. That has caused large droughts which disrupt farming. Shanghai, the largest city in China is experiencing a shortage of water. Less freshwater flows downstream for them to utilize, and with the river emptying into the ocean, salt water is mixing with the fresh water farther upstream each year.

With both positive and negative consequences already surfacing, it will remain to be seen whether or not the Three Gorges Dam will be viewed as a massive success or failure for the Chinese government.

After reading this section and viewing the video clip, make an argumentative claim either for or against the Three Gorges project. Use evidence to support your claim.

Movement in South East Asia

QUESTIONS TO GUIDE INQUIRY

1. How are we, as members of a global society connected?
2. How do the five themes of geography help geographers study the world?

Have you been reading this digital textbook on a device like a Chromebook, an iPad, or a Samsung tablet? If so, chances are the device was either assembled in parts of Asia, or many of the internal components came from there. China, Japan, and South Korea are major producers of automobiles, electronic technologies, and many smaller consumer goods such as clothing and toys. These products are then exported and sold around the world.

Why do you think so many products are made in this region?

Made in China

The United States, as well as many other economic powerhouses in the world, has many corporations which are based in North America, but assemble their products in other countries. If the goal of a business is to make a profit, the reason why so many things are assembled in Asian countries such as China, Korea, and Japan comes down to a company's bottom line - costs. Companies operating in the United States (for example) have restrictions on who can work, how long an

average work day is, and what the minimum amount of pay a worker can receive is.



(Image source: https://upload.wikimedia.org/wikipedia/commons/a/ae/CE_Made_in_China.jpg)

Factories in Asia are able to produce consumer goods at an extremely fast rate, faster than many factories in America. This comes at a risk to the people who work at these factories however. The workers are paid far less than workers in other

countries, and the conditions at the factories have sometimes caused injuries, high turnover rates among employees, and even in extreme cases - death. China in particular is able to manufacture products like iPads at an enormous rate, but the factory that creates these devices is a good example of many of the problems in the region.

Interactive 9.3 Made in China



Learn more about conditions at the factory that produces iPads by viewing this video from the New York Times.

<http://www.nytimes.com/video/business/100000001313019/made-in-china.html>

Should companies based in the United States “outsource” the creation of their product to another country? Why or why not?

Made in America

Despite many claims that America imports too much from Asia, over 28% of everything produced in America is exported to Asia. Computers and electronics make up 17% of everything we export and send to Asian countries. Equipment for transportation, as well as heavy machinery make up the next

How are the countries in Asia and the rest of the world interconnected through trade?

Japan is considered to be one of the pioneers in moving people over high-speed railways. The Japanese Bullet Train known as the Shinkansen was first envisioned in 1959 and opened to the public in 1964. With much of the land in Japan being covered in mountains and much of the population centered around the coast, travel to certain parts of the country was difficult.

Legend:

- in operation
- in operation (Mini-Shinkansen)
- under construction
- planned

Color-coded lines:

- JR Hokkaido
- JR East
- JR Central
- JR West
- JR Kyushu

Map labels include:

- HOKKAIDO SHINKANSEN
- AKITA SHINKANSEN
- YAMAGATA SHINKANSEN
- JOETSU SHINKANSEN
- HOKURIKU SHINKANSEN
- CHŪO SHINKANSEN
- SAN'YŌ SHINKANSEN
- KYŪSHŪ SHINKANSEN
- TŌKAI DŌ SHINKANSEN
- TŌHOKU SHINKANSEN

Major stations and locations marked include: Sapporo, Shin-Aomori, Morioka, Sendai, Niigata, Nagano, Tokyo, Nagoya, Kyoto, Osaka, Hiroshima, Fukuoka, and Kagoshima-Chūō.

Scale: 0, 200, 400, 600, 800, 1,000 km

Why might the railways be set up along the routes depicted in this map?

The solution in Japan became a solution eventually copied by China, the Koreas, and other parts of the world. The Shinkansen is a fast train often referred to by locals as the “Bullet Train” due to its speeds and shape. When first opened in the 1960s, the train was able to travel an unprecedented 130 miles per hour.

Improvements to the train now give it the ability to travel almost 300 miles per hour. If a Japanese person wanted to drive from Kyoto to Tokyo, even under the best driving conditions, it would take 6 hours to travel the 284 miles. On the bullet train, that time is cut down to just over an hour.

Many people in Japan live in one city and work in another. It is not uncommon for a Japanese person to live 50 (or more) miles away from the city in which they work. How might a high speed rail system benefit their country? How might developing a high speed rail system in other countries benefit the citizens living there?

South Korea developed their high speed railway system over a long period of time, bringing it operational in 2004. While not as fast as its Japanese counterpart, the KTX high-speed rail has significantly cut down the travel time from place to place in South Korea.

China’s developed beginning in the early 1990s and as of December 2014, have the longest railway network with almost 10,000 miles of track laid across the country. China, as well as Japan and Korea, continue to invest in improving the technology and expanding the service.

The technology behind the Japanese, Chinese, and Korean high speed rails has been studied by other countries and has influenced the development of similar lines in other countries.

Moving people around the world has become faster due to the expansion of technology that had its first commercial successes in Asia.