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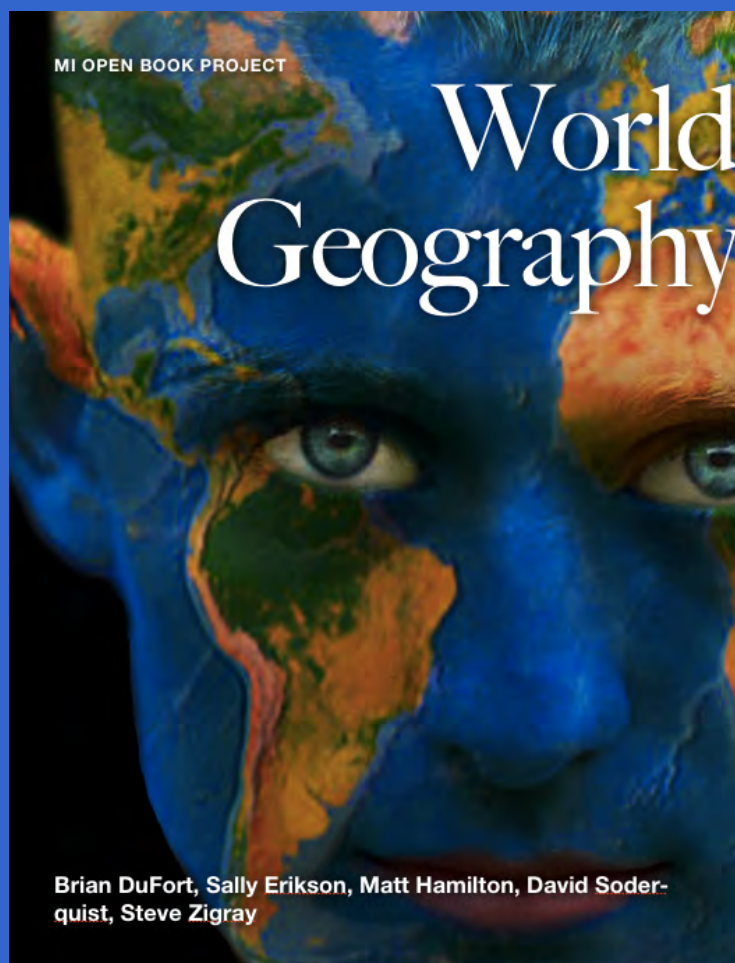
World Geography

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.

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Shepherd Public Schools

Odyssey MS/HS

Brian is originally from Midland, MI and is a graduate of Northern Michigan University. He has spent his entire teaching career at Odyssey Middle/High School, an alternative education program in the Shepherd Public School system. In 2001, his environmental studies class was one of seven programs from the United States and Canada to be chosen as a winner of the Sea World/Busch Gardens Environmental Excellence Award. Brian is also the Northern Conference director of the Michigan Alternative Ath-

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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.

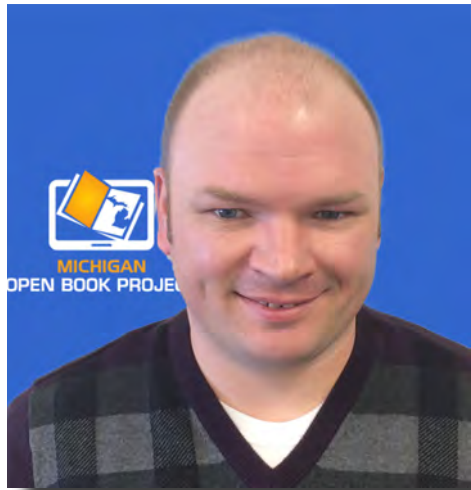


Matt Hamilton

East Jordan Public Schools

East Jordan Middle School

Matt grew up in Cadillac, MI. He holds a bachelor and masters degree from Michigan State University. He currently teaches middle school History and Geography. Matt started and advises a club at his school called the Shoe Club to inspire his students to Dream Big. His wife and two daughters enjoy traveling and spending time in the outdoors.



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Three Rivers Middle School

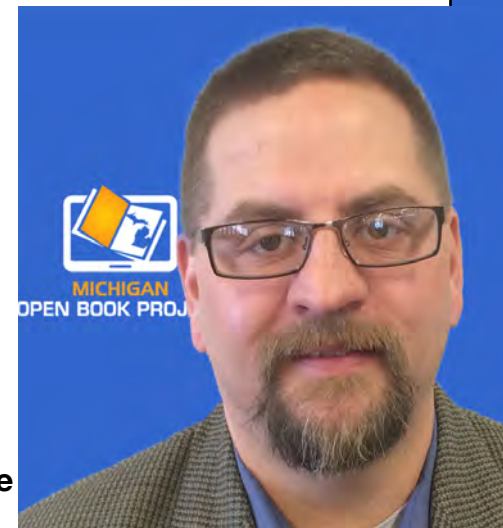
For the Past 11 years David has taught 6-8 grade Social Studies for Three Rivers Middle School. He serves as Department Head, School Improvement Member and Social Studies Rep for his area. Over the past few years he has completed his Masters Degree in Curriculum and Instruction and become a state recognized Instructional Coach.

Steve Zigray

Concord Community Schools

Concord Middle School

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



**MICHIGAN
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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.

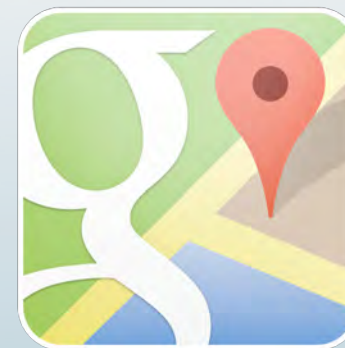
How does where societies develop influence their place in the world?

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:

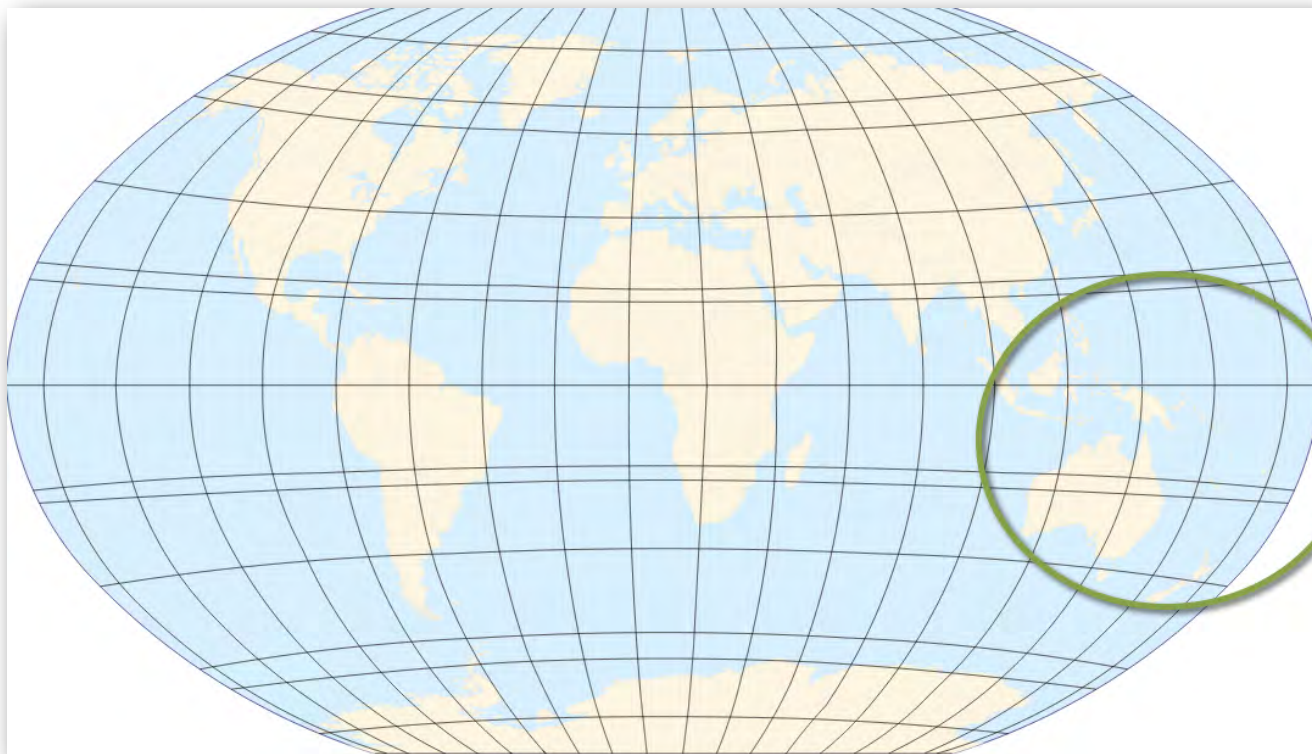


Image Source: http://upload.wikimedia.org/wikipedia/commons/5/56/World_map_longlat.svg

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?

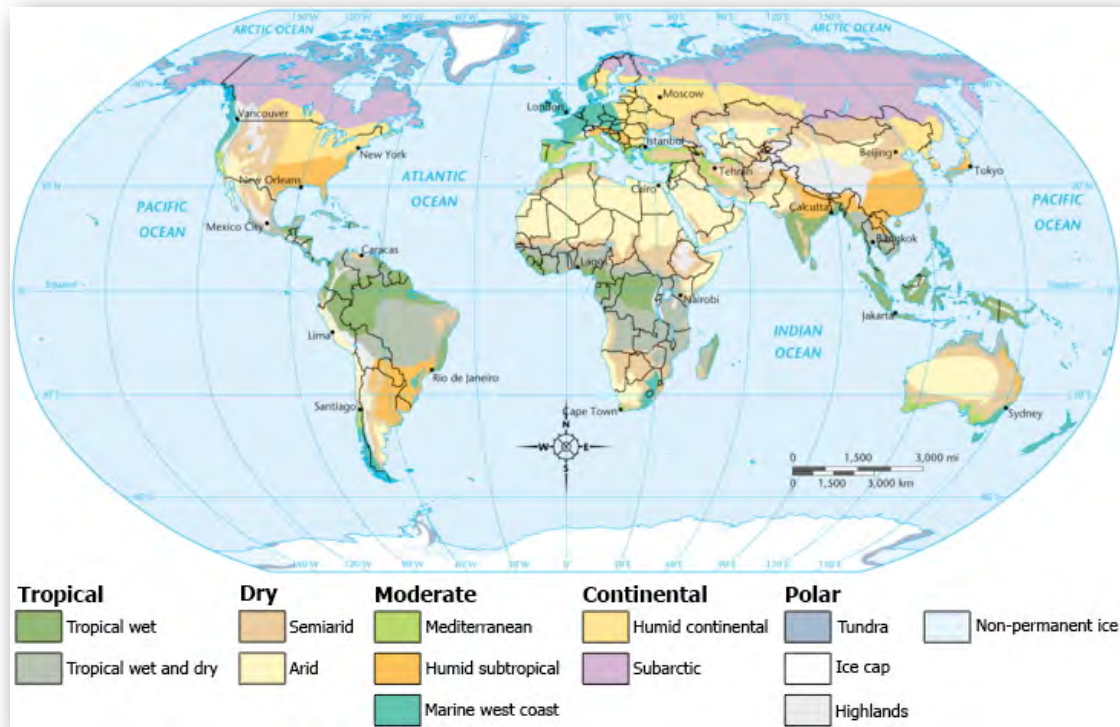


Image source: https://upload.wikimedia.org/wikipedia/commons/d/df/ClimateMap_World.png

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:

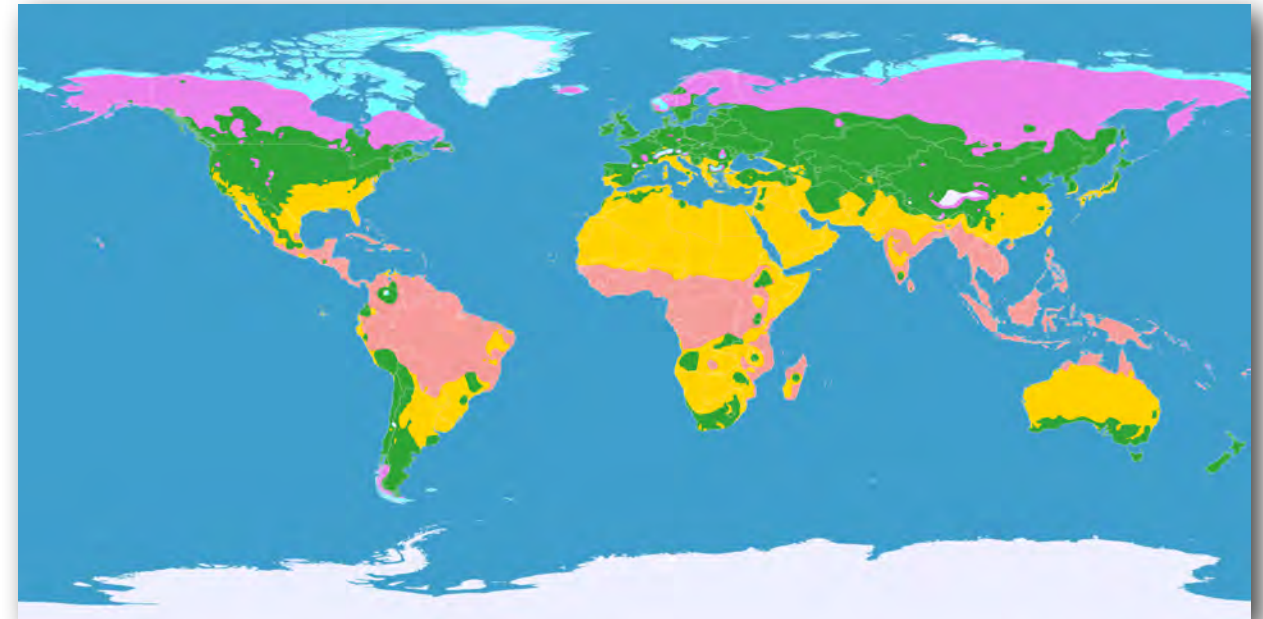


Image source: <https://upload.wikimedia.org/wikipedia/commons/5/58/Klimagürtel-der-erde.png>

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?

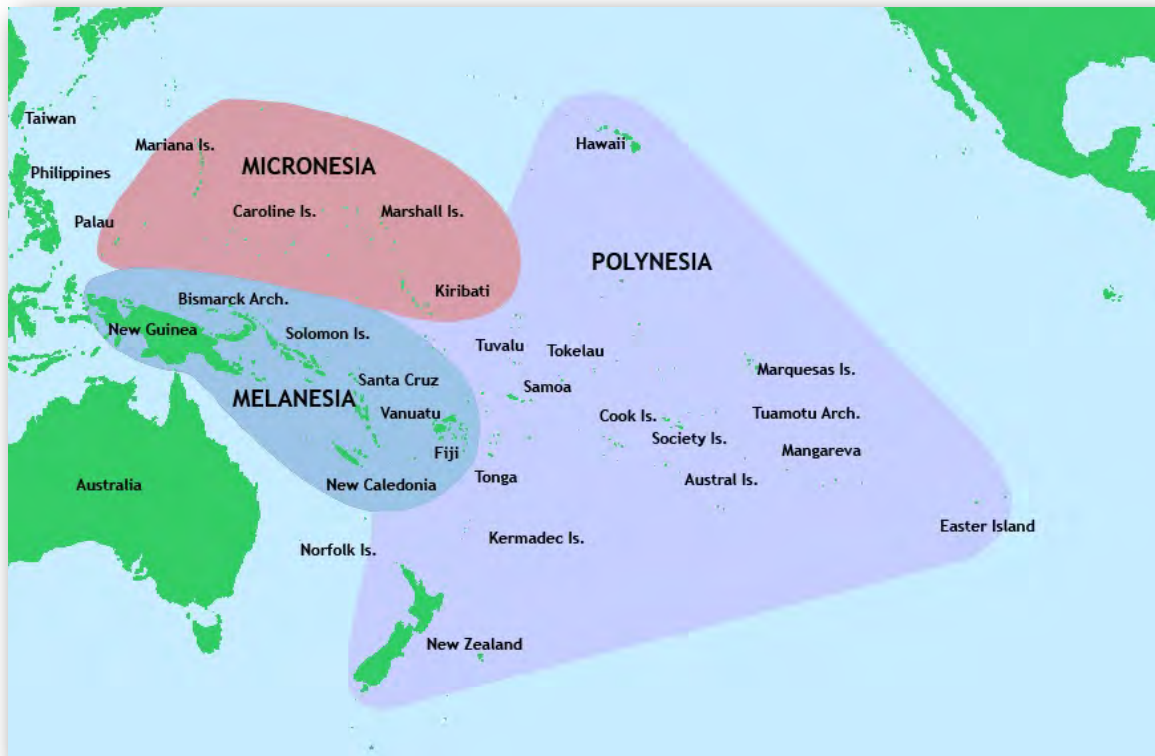


Image source: Image source: http://upload.wikimedia.org/wikipedia/commons/9/93/Pacific_Culture_Areas.jpg

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.

Section 3

Human Geography of 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?

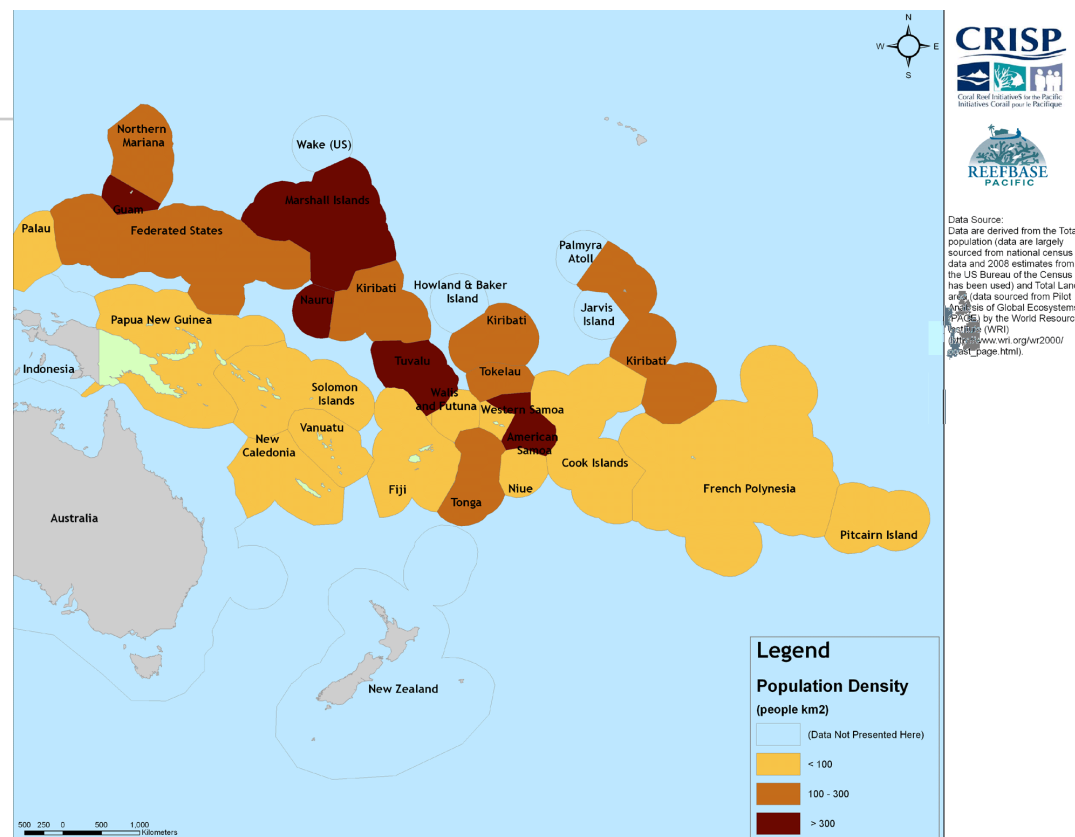


Image used with permission. Image source: http://www.reefbase.org/images/pacific/peoplereefs_figure3.gif

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?

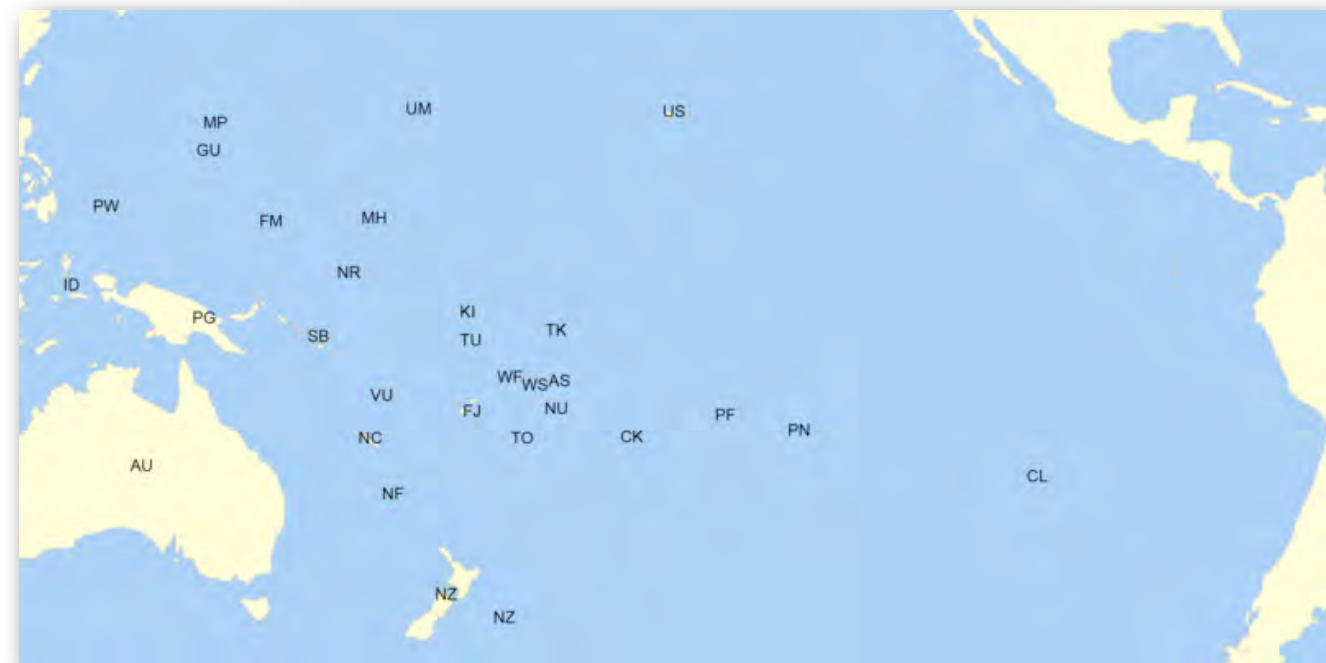


Image source: https://commons.wikimedia.org/wiki/File:Map_of_Oceania_country_codes.png

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.

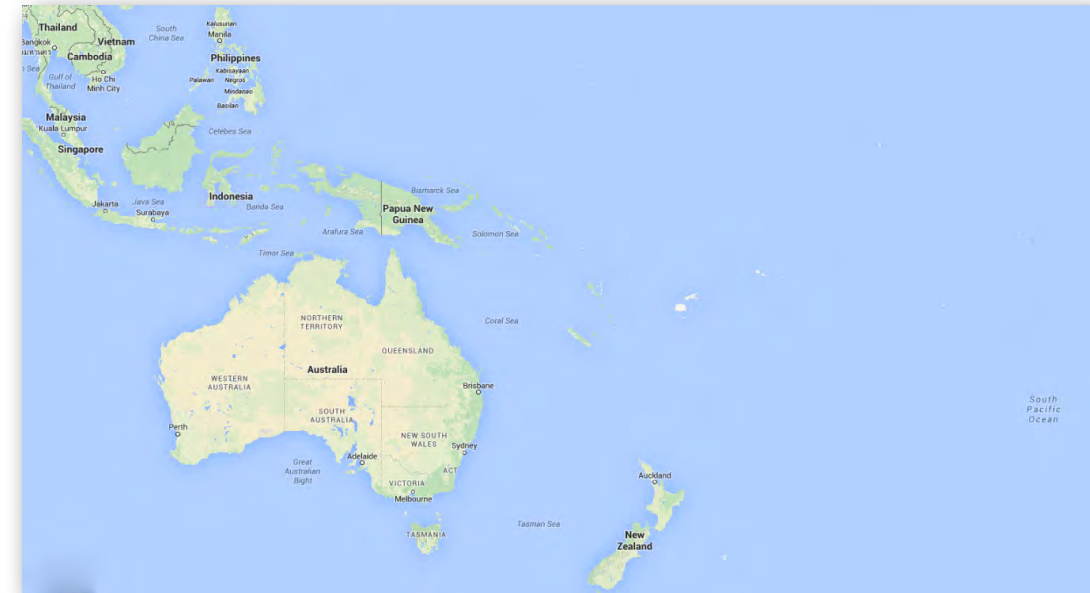


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Interactive 8.3 Culture Grams



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.

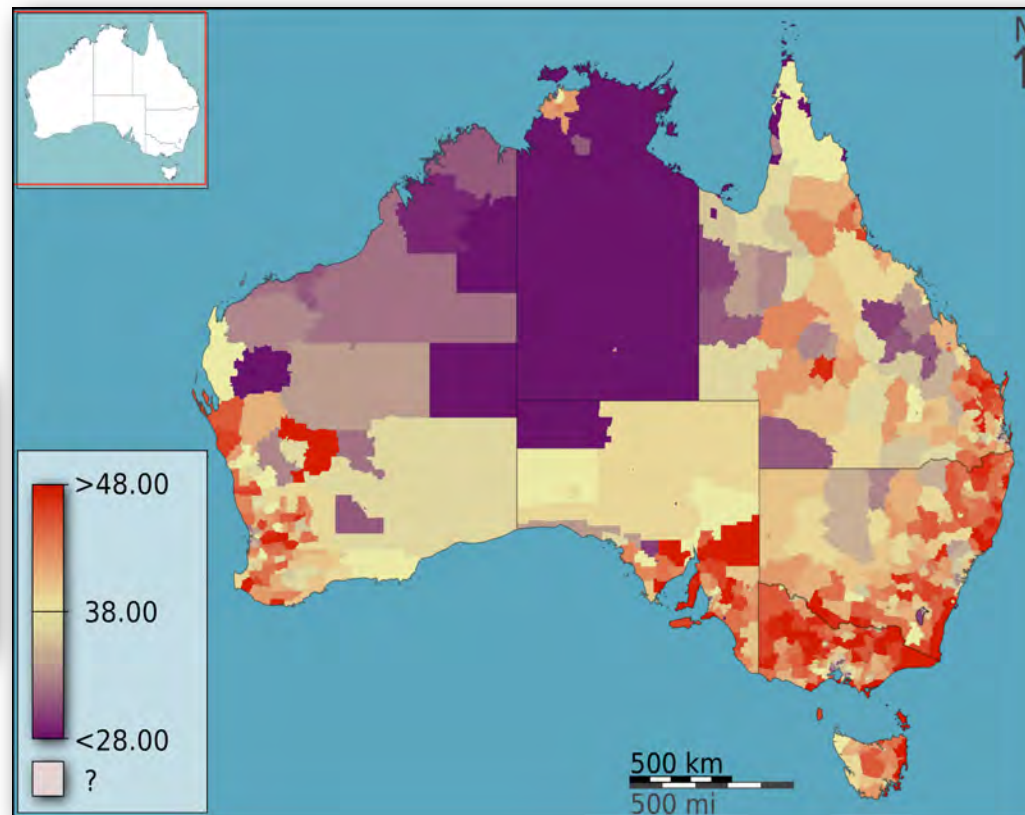


Image source: https://upload.wikimedia.org/wikipedia/commons/thumb/f/fa/Australian_Census_2011_demographic_map_-_Australia_by_SLA_-_BCP_field_0109_Median_age_of_persons.svg/2000px-Australian_Census_2011_demographic_map_-_Australia_by_SLA_-_BCP_field_0109_Median_age_of_persons.svg.png

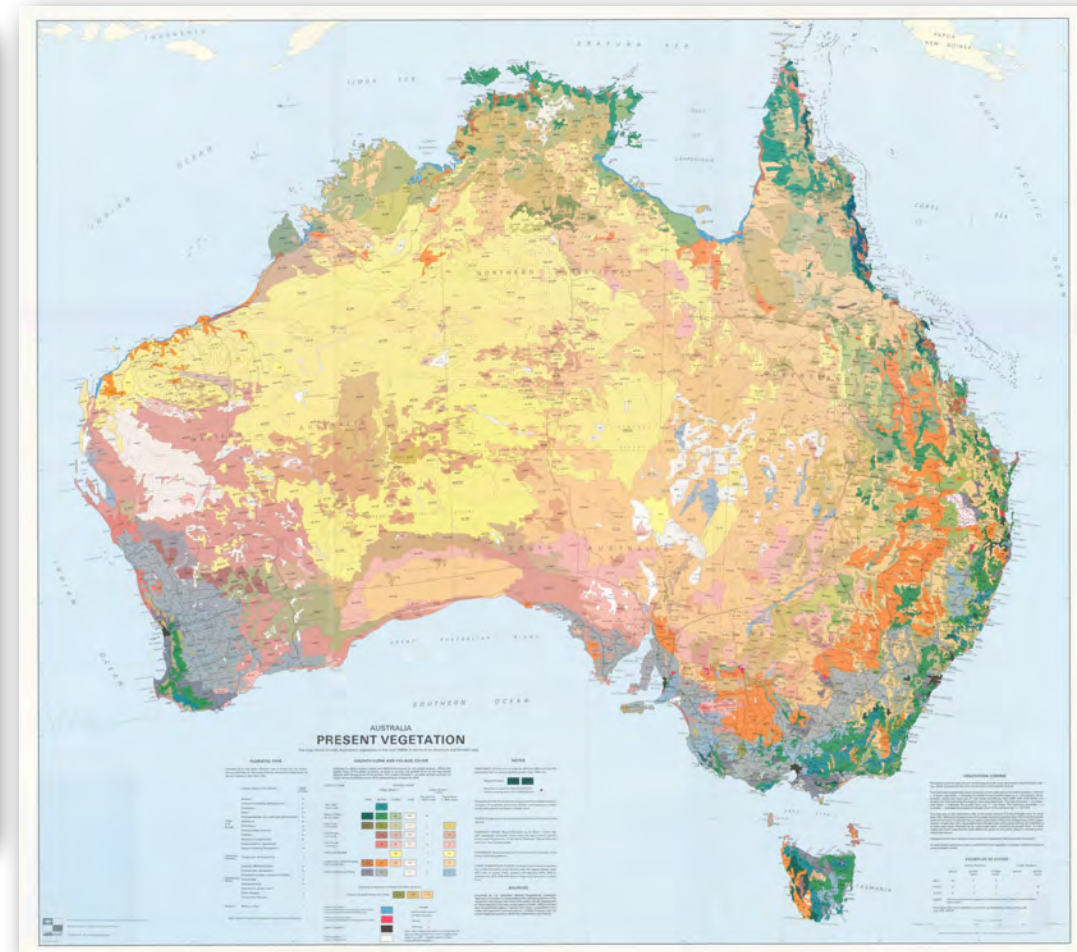


Image source: https://upload.wikimedia.org/wikipedia/commons/c/c5/Australia_Present_Vegetation_Map.png



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.

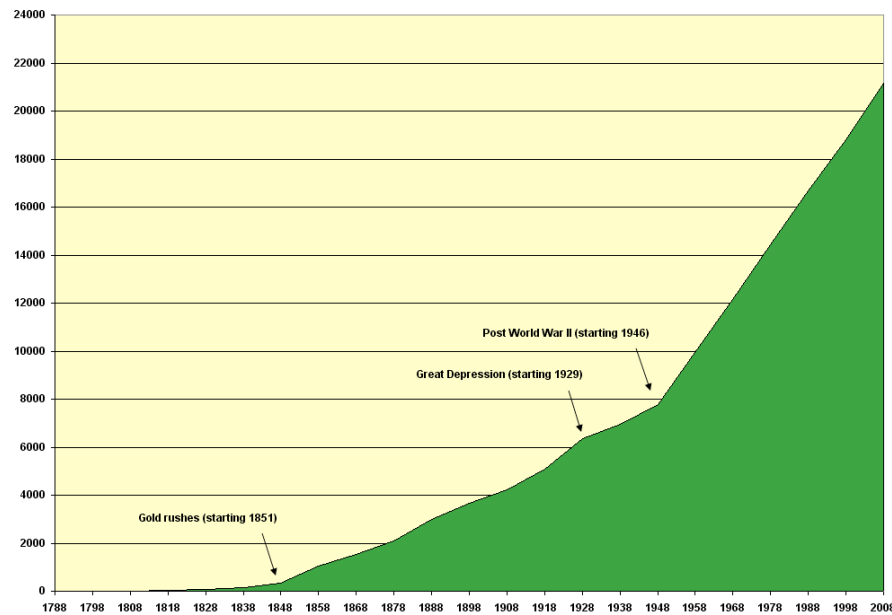


Image source: https://upload.wikimedia.org/wikipedia/commons/c/c9/AUS_population_development_1788_to_2008.png

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

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.

Interactive 8.15 Antarctic Ice Shelves



Learn more about the dangers facing the Antarctic Ice shelves in this video.

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 Amundsens'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.

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

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

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.

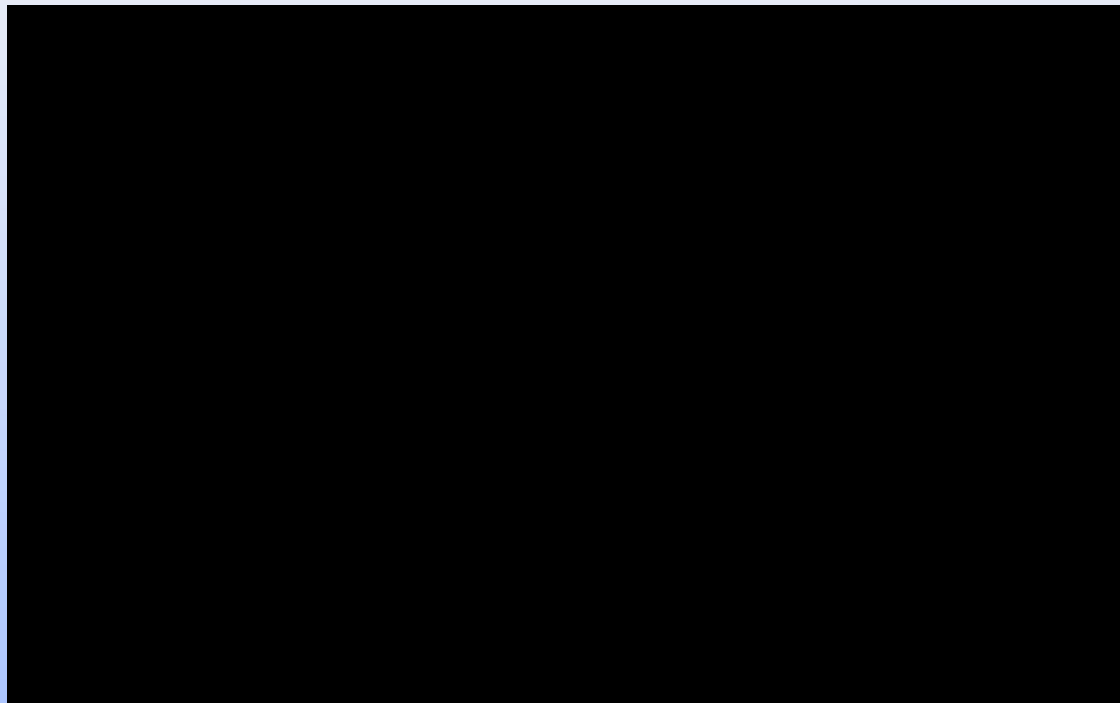
Territorial claims were claims on the land made by different countries. The Antarctic Treaty was created in 1961 but neither

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?

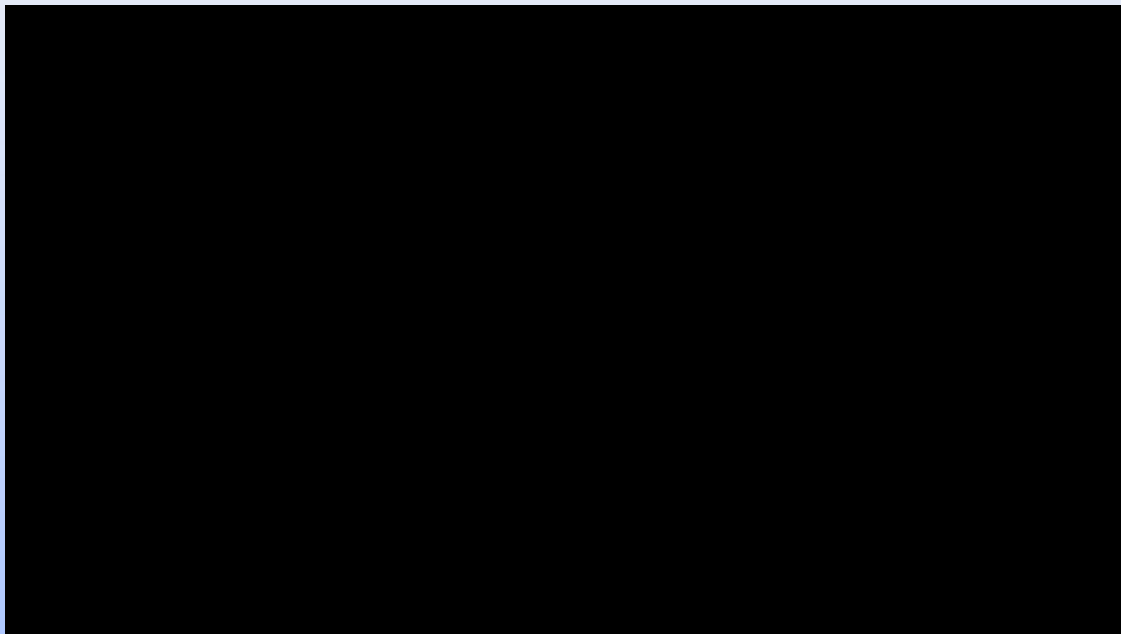
“The greatest threat to our planet is the belief that someone else will save it.” - Robert Swan

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



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