SOUTHEAST ASIA, OCEANIA, AUSTRALIA AND NEW ZEALAND
SOUTHEAST ASIA
PHYSICAL GEOGRAPHY
Landforms

• The 11 countries of Southeast Asia can be divided into two areas: the mainland in the west and the island archipelagoes in the east.

• The landmass of the island countries is actually larger than the region’s mainland.

• Due to its position along the Pacific Ocean within the Ring of Fire, most of Southeast Asia is mountainous, has active volcanoes, and is prone to earthquakes.

• Borneo has no volcanoes, making it the exception.
Volcanoes in Southeast Asia

Bay of Bengal
BURMA
LAOS
THAILAND
VIETNAM
CAMBODIA
Gulf of Thailand
THAILAND
Andaman Sea
Gulf of Thailand
BRUNEI
MALAYSIA
SINGAPORE
INDONESIA
JAVA
Java Sea
Merapi
Semeru
Dempo
Krakatau
Philippine Sea
PHILIPPINES
Philippine Plate
Taal
Mayon
Philippine Plate
PACIFIC OCEAN
PACIFIC PLATE
INDEAN PLATE
Bay of Bengal
20°N
0°
Scale Bar
715 km
715 mi
Water Systems

• Southeast Asia’s waterways make it one of the most accessible regions in the world.

• The river systems differentiate, or demonstrate how features differ from one area to another, the farming economies of the lowlands from the mountain communities.

• The Mekong River is the longest in the region and it flows through five countries.

• The other four major rivers are shorter and are mostly confined within a single country.
Climates, Biomes, and Resources

• The climate is tropical and subtropical and is based more on rainfall than temperature.

• During the rainy seasons, some weather systems produce severe tropical storms similar to hurricanes.

• Southeast Asia has one of the few equatorial rain forests, and it exhibits exceptional biodiversity, or the diverse life forms in a habitat.

• The region is rich in minerals and oil.
BORNEO
Stop and Jot:

1. What two sub regions are included in Southeast Asia?

2. Most of the region is at risk for what natural disaster? Why?

3. What natural feature allows the region to be one of the most navigable?

4. What physical feature allows the region to be exceptionally biodiverse?
HUMAN GEOGRAPHY
History and Government

• Its position between India and China has made Southeast Asia, at some times, a shatter belt, or a region where political alliances fracture based on ethnicity, and at other times, a buffer zone, or a neutral area separating powerful nations from each other.

• Independence from colonial powers, such as France, was not always peaceful, with conflicts occurring in Cambodia, Vietnam, and elsewhere.

• Guerilla independence movements still threaten the peace, as do military dictatorships.
ANGKOR WAT
Population Patterns

• Southeast Asia is not densely populated, though there are several urban centers that have high population densities.

• Indonesia is the fourth most populous country in the world.

• The region is becoming more urban as it becomes more industrialized.

• Each country has at least one large city that has become a thriving part of the world economy.
Society and Culture Today

• The subregion contains hundreds of different ethnic groups who speak their own languages.

• The greatest ethnic diversity is found on the island countries.

• The area’s religions reflect historical waves of immigration, making Islam the most common.

• Women in the area face a double burden of working both outside and inside the home, but activism is helping change conditions slowly.

• Religion has heavily influenced the area’s arts.
Sumatra is Indonesia’s second largest island (the largest is Borneo) and is home to many different ethnic groups.

The woman in this photo is selling produce in a market in Bukittinggi, which is a city of approximately 90,000 in the highlands that parallel the west coast of the island. Most of the residents of the city are members of the largest ethnic group on Sumatra, the Minangkabau. Minangkabau society is Muslim and matrilineal. Most are farmers who grow rice, cinnamon, and fruits and vegetables in terraced fields.
Economic Activities

- Southeast Asia is considered an area of emerging markets, historically weak economies now ripe for foreign investment.
- Agriculture is the leading economic activity.
- Rich in mineral resources and oil, as the area industrializes, countries are using these resources internally, rather than exporting them.
- Most shipping between Europe and Asia passes through Singapore’s free port, free of import duties, creating a booming economy.
THAI ECONOMY
Stop and Jot

1. What is a shatter belt?

2. What is a buffer zone?

3. Where is Southeast Asia most densely populated? Why?

4. What is the predominant religion in the region? Why?

5. Where does most trade pass through from Europe to Asia? Why?
PEOPLE AND THEIR ENVIRONMENT
Managing Resources

• As the area’s economies shift from rural to urban, deforestation and pollution grow.

• Palm oil plantations now form the single biggest threat to rain forests, as large areas of forest are cleared.

• The loss of forested lands is putting many unique plant and animal species at risk.

• The practice of **shifting cultivation**, or a form of agriculture where an area is cleared, cultivated, then abandoned, also threatens rain forests.
AN OIL THAT’S EVERYWHERE
Palm oil plantations are an important part of Malaysia and Indonesia's economies. In order to support them, rain forests are being cut down.

1. Do the benefits of palm oil plantations outweigh the threats to Malaysia and Indonesia's rain forests?

Yes, boosts economies, increases incomes, and promotes industrialization. No, destroys natural resources and ecosystems that cannot be replaced.
Deforestation in Malaysian Borneo

Palm oil plantations are an important part of Malaysia and Indonesia's economies. In order to support them, rain forests are being cut down.

2. Explain why erosion caused by deforestation can be a problem in countries with tropical climates, such as Malaysia.

During dry seasons, the ground is exposed to sun and dries up. During wet seasons, monsoon rains flood the land causing soil and its nutrients to be washed away.
Palm oil plantations are an important part of Malaysia and Indonesia's economies. In order to support them, rain forests are being cut down.

3. Compare the vegetation in the forested and cleared areas. How has deforestation affected the area’s ecosystems?

Endangered plant and animal species by destroying habitat; reduced natural resources, such as food and shelter, to these species.
Human Impact

• Industrialization and economic growth have polluted and harmed the local environment.

• Urbanization also strains shared local resources such as water supplies.

• Toxic waste dumping, mining, and fishing are all activities causing water pollution in the area.

• Air pollution is becoming increasingly worse, as forests are cleared by fire to make way for palm oil plantations.
Vietnam is home to thirteen major river systems. This equals two percent of the world’s total. The increase in industry without the increase of water treatment has meant that in some areas the local water is unusable.

There are plans to address the pollution in at least one river system, however. The Vietnamese government has plans to build 24 waste processing plants in the Nhue-Day river basin by 2030.
Addressing the Issues

• Many countries are shifting their economic policies to focus on sustainable development, or economic growth that does not deplete natural resources in a given area.

• Some countries have limited timber exports and introduced reforestation programs to help combat further loss of rain forests.

• Although Indonesia refused to pass the regional Transboundary Haze Pollution agreement, it instituted a two-year ban on forest clearing.
Many countries prohibit teak logging to help prevent deforestation.
Stop and Jot

1. What is the biggest threat to the regions rainforests? Why?

2. What is shifting cultivation? Why is it harmful to the rainforests?

3. How has urbanization and industrialization harmed the environment?

4. What steps are being taken to fix these issues?
AUSTRALIA AND NEW ZEALAND
PHYSICAL GEOGRAPHY
Landforms

• Australia lies between the Pacific and Indian Oceans in the Southern Hemisphere.

• Although an island, Australia is classified as a continent because of its massive size.

• The Outback is made up of the Western Plateau, which is mostly desert and sparsely populated.

• New Zealand lies about 1,000 miles southeast of Australia and consists primarily of 2 islands, both of which have beaches, mountains, and forests.
Water Systems

• Australia is the driest inhabited continent on Earth, with freshwater unevenly distributed, unreliable, and seasonal.

• Its main water problem is that people live in the eastern and southern areas while the most rainfall occurs in the north.

• New Zealand has an abundance of fresh water.

• Snow-capped mountains on both of the North and South Islands feed fast-flowing rivers and streams.
Hopetoun Falls, shown here, is part of Great Otway National Park on the southeastern coast of Australia. This is a rain forests ecosystem, the exact opposite of the arid landscapes of the Red Centre. Here heavy rainfall allows tall trees, huge ferns, and lush mosses to thrive.
Climates, Biomes, and Resources

- Australia’s climate varies widely from temperate zones to desert regions.
- Marsupials, such as kangaroos, dominate Australia’s northern savannah.
- The Great Barrier Reef, along the northern coast, is home to many different kinds of sea creatures.
- New Zealand’s climate varies from warm subtropical to cool temperate zones.
- Mining is important in both countries, while New Zealand’s fertile soils also support agriculture.
Biomes

Australia has deserts and tropical savannas; savanna is dominated by kangaroo, koala, and wallaby; wetlands support a variety of wildlife; Great Barrier Reef contains many species of sea life. New Zealand mostly has marine west coast climate with plenty of rain; many species of plants are only found here.

Coral

The coral reef that makes up the Great Barrier Reef comes in all shapes and sizes. Together it makes up the world's largest reef system, stretching over 1,600 miles. It is a delicate system, and is under constant threat.
STOP AND JOT

1.
HUMAN GEOGRAPHY
History and Government

• The Aborigines are the earliest inhabitants of Australia, and the Māori are New Zealand’s indigenous population.

• Both countries were settled by Britain, which had a disastrous impact on the indigenous peoples.

• Today, dominions, or largely self-governing countries within the British Empire, are constitutional monarchies with parliamentary systems.
ABORIGINES
Population Patterns

• Both countries have multicultural communities.

• About 2 percent of Australia’s population is Aborigine, and about 7 percent of New Zealand is Māori.

• Most Australians live along the mild and fertile southern, eastern, and southwestern coasts.

• New Zealand’s urban populace lives mostly on the North Island.

• Australia’s aging population is a concern.
The first European settlers in Australia were British convicts, who lived in penal colonies. By the 1850s, free British settlers had arrived.

1. What part of Australia was the first to be settled by Europeans?

A. Northeast  
B. Southeast  
C. Northwest  
D. Southwest

B. Southeast
The first European settlers in Australia were British convicts, who lived in penal colonies. By the 1850s, free British settlers had arrived.

2. Based on the patterns of European settlement, what can you infer about the geography of Australia?

Coastal areas are more hospitable than interior, especially along southeast coast; interior is arid and less suited for agriculture and settlement.
The first European settlers in Australia were British convicts, who lived in penal colonies. By the 1850s, free British settlers had arrived.

3. Do you think the areas of Aboriginal resistance are their original territories or areas of relocation? Explain.

Original: Aborigines held onto small areas of sacred land. Relocated: European settlement encroached on Aboriginal homelands and forced resettlement.
Society and Culture Today

• Both countries blend European, indigenous, and Asian elements into their cultures.

• English is the major language, and both countries offer high-quality education and health care.

• Relations between indigenous populations and European descendants have improved with increased integration and better understanding.

• Roles for women are evolving as more women participate in the workforce.
In the late nineteenth century, many European-Australians came to believe that Aborigines were near extinction. However, there was an increasing number of people with mixed Aborigine-European parentage. Efforts began to assimilate these mixed-race children into Australian society.
By the late 1930s every state in Australia had adopted policies where mixed-race children were forcibly removed from their Aboriginal families. These children were sent to live in orphanages or to live with or work for foster families. They are the Stolen Generations.
The little girls in this 1934 newspaper clipping are members of the Stolen Generations.

The caption reads, in part, "A Group of Half-Caste and Quadroon Children at the Darwin half-caste home."
By the late 1930s every state in Australia had adopted policies where mixed-race children were forcibly removed from their Aboriginal families. These children were sent to live in orphanages or to live with or work for foster families. They are the Stolen Generations.
On the clipping, someone has written, "I like the little girl in centre of group, but if taken by anyone else, any of the others would do, as long as they are strong." The person has also marked one of the children in the photo with an "x."
The removal policy continued through the late 1960s. In 1998 Australia began to celebrate "National Sorry Day" to commemorate and remember the forced removal of the Stolen Generations. (The word "sorry" had deep cultural meaning to Aborigines.) In 2008 the Australian government issued an official apology.
Economic Activities

• Australia and New Zealand have a close economic relationship.

• Both countries have well developed service sectors.

• Australia’s diverse economy includes agriculture, mining, and industrial equipment, and is home to many natural resources that invite significant foreign investment.

• New Zealand’s main industries include food processing and textiles, and the country benefits from many natural resources.
STOP AND JOT

1.
PEOPLE AND THEIR ENVIRONMENT
Managing Resources

• Australia’s livestock practices have degraded many of the natural ecosystems of the country.

• New Zealand’s fertile soil enables it to grow a multitude of crops and support a thriving ranching industry.

• The introduction of non-native plants and animals has adversely affected the ecosystem, with some new plants overtaking farmland and new animals endangering native species.
AUSTRALIA’S FERAL ANIMALS
Human Impact

• The protection of forest, soil, and freshwater resources are issues of concern.

• In Australia, soil erosion is compounded by overgrazing and the worst drought in over a century.

• Land use has modified the physical and chemical nature of rivers in both countries, threatening freshwater supplies.

• Coral and other marine life are suffering from rising ocean temperatures and pollution.
The land of the Kaingaroa Forest is owned by either the New Zealand government or local Maori. The Maori won back the right to the land by invoking the treaty of Waitangi.

The trees of the forest are owned by a private company, which has a forestry license on the land. Currently the forest is growing its third crop of trees. The wood grown in Kaingaroa is sold to Japan, China, South Korea, and India, among others.
Addressing the Issues

- The Australian and New Zealand governments have enacted laws and created organizations to combat environmental problems.

- National resource management regions (NRMs) have been created to protect Australia’s natural environment and increase the sustainability of its ecosystems.

- Nongovernmental organizations, such as the World Wildlife Fund, work to conserve both countries’ biodiversity, promote environmental education, and encourage effective conservation.
**Environmental Problems and Solutions**

**Directions:** The introduction of foreign species has led to degradation of Australia’s and New Zealand’s once isolated environments. Draw a line from the invasive species example to the environmental consequences of each.

- **In 1859, 24 European rabbits were introduced to Australia for hunting.**
  - Having no natural predators in Australia, by 1926, the population increased to 10 billion rabbits.
- **Weasels and ferrets were brought in to control the growing rabbit population.**
- **The prickly pear was introduced in the 1900s for use in the cochineal dye industry.**
- **Native vegetation with deep root structures was replaced with foreign shallow-rooted crops.**
- **Invasive plant species turn valuable farmland into miles of weeds.**
- **Invasive animal species destroy native plants, causing soil erosion as land is left exposed to wind and water.**
- **Nonnative plants lack the deep roots needed to keep rainwater from reaching far underground. Salt rises to the surface, causing soil and water salinity.**
- **Unintended native species, such as native birds, are killed by nonnative predators.**
STOP AND JOT

1.
OCEANIA
PHYSICAL GEOGRAPHY
Landforms

- Oceania consists of three island groups that extend across the Pacific Ocean: Melanesia, Micronesia, and Polynesia.

- Earthquakes and volcanic eruptions occur on many **high islands**, islands with mountain ranges and rich, volcanic soils.

- **Low islands**, or ring-shaped islands known as atolls, have poor soil and few natural resources.
The Low Islands and High Islands

Directions: Oceania’s thousands of islands extend across millions of square miles of the Pacific Ocean but are made up mainly of two types: high islands and low islands. Look at the pictures of low islands and high islands. Compare features of the two island types in Oceania by dragging descriptions of landforms, population, climates and biomes, and resources into the appropriate spaces below each picture.

**Landforms**

- scarce freshwater sources besides rain
- ring-shaped islands called atolls
- lagoons encircled by atolls
- primarily a few feet above sea level

**Landforms**

- mountains that fan into coastal plains
- mountain ranges split by valleys
- plentiful freshwater
- earthquakes and volcanoes
The Low Islands and High Islands

Directions: Oceania’s thousands of islands extend across millions of square miles of the Pacific Ocean but are made up mainly of two types: high islands and low islands. Look at the pictures of low islands and high islands. Compare features of the two island types in Oceania by dragging descriptions of landforms, population, climates and biomes, and resources into the appropriate spaces below each picture.

Population

More uniform cultures due to lack of physical barriers, which increased interaction among people.

Population

Varied and unique cultures found in valleys isolated by, often inaccessible, mountains.
Water Systems

• The Pacific Ocean surrounding Oceania is the world’s most biodiverse ocean and has both underwater mountain ranges and trenches.

• Important trade routes cross the ocean surrounding the region.

• The bodies of freshwater vary depending on island type: high islands have freshwater that supports agriculture, and low islands usually have no freshwater other than rainwater basins.
Climates, Biomes, and Resources

- Most of the region experiences a tropical wet climate with a dry and wet season.
- Dry, low islands with little rainfall have minimal vegetation, while high islands have rainforests and rich soils.
- The isolation of the islands makes endemic species, or species that are restricted to a certain area, vulnerable to external influences.
- High islands export sugar, cocoa, and coffee, along with lumber from rain forests.
- Tourism also aids the economies of the region.
The Low Islands and High Islands

**Directions:** Oceania's thousands of islands extend across millions of square miles of the Pacific Ocean but are made up mainly of two types: high islands and low islands. Look at the pictures of low islands and high islands. Compare features of the two island types in Oceania by dragging descriptions of landforms, population, climates and biomes, and resources into the appropriate spaces below each picture.

### Climate and Biomes

**Low Islands**
- dry climate that supports shrubs and grasses
- flat, low land that produces little rainfall
- little arable land due to dry climate

**High Islands**
- hot, steamy rain forests on island interiors
- rich soils that support diverse plants and animals
- plentiful rainfall due to mountains causing warm, moist air to rise, then cool and condense
STOP AND JOT

1. What are the primary difference High and Low Islands?

2. Which island has more freshwater available? Why?
HUMAN GEOGRAPHY
History and Government

• Many indigenous cultures existed in Oceania before the arrival of European settlers in the 1800s.

• World War I and II dramatically changed Oceania, with islands turned into trust territories, or dependent areas under a foreign country’s temporary control.

• Today, most islands enjoy independence, with many exercising dual forms of government that combine colonial influences with indigenous traditional practices.
CAPTAIN COOK
Population Patterns

- Melanesia includes Papua New Guinea, Fiji, the Solomon Islands, and New Caledonia, though island cultures differ greatly.
- Micronesia’s densely populated islands include the Federated States of Micronesia, Nauru, Kiribati, Guam, and the Mariana Islands.
- Polynesia includes Samoa, Tonga, Tuvalu, and French Polynesia, with most sharing similar languages and culture.
- Populations vary widely from island to island.
AMERICAN SOMOAN FOOTBALL
Society and Culture Today

- South Pacific countries practice a blend of European, Asian, and indigenous traditions.
- French is widely spoken, along with varieties of **pidgin English**, a mix of English and an indigenous language.
- The quality of the islands’ education and healthcare vary widely, and many islands suffer from poor economic prospects.
- The status of women is of great concern, as some cultural practices tolerate violence against women.
Tattooing was an ancient traditional art form very common on the South Pacific islands. The word tattoo is based on the Tahitian verb *tatu*, which means "to strike." British explorer Captain James Cook was the first to use the word tattoo in 1769.

This image shows a woman in Papua New Guinea getting a facial tattoo. The women of Tufi are famous for their intricate facial tattoos. Women are tattooed at the age of 18 as a signal that they are ready for marriage.
Economic Activities

• Agriculture is the subregion’s main economic activity, but ecotourism is becoming more popular.

• Trade between Oceania and the rest of the world has increased because of improvements in both transportation and communications.

• Agriculture and mining produce most of the area’s export income, but handicrafts, such as baskets, masks, and pottery, also contribute.
Tourism is becoming an increasingly important part of the economies of many of the island countries of Oceania. For some countries of Oceania, including Fiji, French Polynesia, Vanuatu, the Cook Islands, and Samoa, tourism is the major industry.

In the early 1980s many countries of Oceania banded together to form the South Pacific Tourist Organization. The goals of the organization include improving air and sea access to the islands and developing sustainable tourism. This image shows a resort on the island of Fiji.
STOP AND JOT

1. What is pidgin English?
2. Where did the word tattoo come from?
3. What is a major economic activity in Oceania?
PEOPLE AND THEIR ENVIRONMENT
Managing Resources

• Although Oceania accounts for minimal greenhouse gas emissions, it is the most vulnerable to them.

• Resource management is being implemented to combat overfishing and deforestation.

• Overseas companies have established joint efforts with local governments to reduce the impact of ecotourism on the environment.

• Programs encouraging environmental education and economic development are underway.
## Oceania: Water and Energy

<table>
<thead>
<tr>
<th></th>
<th>% Water Access, 2009 (Rural)</th>
<th>% Water Access, 2009 (Urban)</th>
<th>CO₂ Emissions (metric tons per capita, 2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>100</td>
<td>100</td>
<td>18.4</td>
</tr>
<tr>
<td>New Zealand</td>
<td>100</td>
<td>100</td>
<td>7.4</td>
</tr>
<tr>
<td>Tahiti (French Polynesia)</td>
<td>100</td>
<td>100</td>
<td>3.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>74</td>
<td>92</td>
<td>1.9</td>
</tr>
<tr>
<td>Tonga</td>
<td>100</td>
<td>100</td>
<td>1.7</td>
</tr>
<tr>
<td>Fiji</td>
<td>95</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>Samoa</td>
<td>96</td>
<td>96</td>
<td>0.9</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>87</td>
<td>97</td>
<td>0.5</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>33</td>
<td>87</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**Source:** The World Bank
Human Impact

• The testing of nuclear weapons decades ago exposed some to massive doses of harmful radiation.

• Climate change threatens the region by increasing the frequency and severity of storms, while also melting polar ice caps that may bring a devastating rise in sea level.

• **Ocean warming**, or the rise in temperature of ocean water, can destroy coral reefs and cause other problems.

• Pollution and deforestation are also concerns.
Global Sea Level Trends

Climate change is causing rises in sea levels that threaten many regions of the world.

1. Between 1992 and 2013, where did sea levels rise the most?

A. Antarctica
B. Europe
C. Oceania
D. Southwest Asia

C. Oceania
Climate change is causing rises in sea levels that threaten many regions of the world.

2. Between 1992 and 2013, where did sea levels fall the most?

A. Antarctica
B. Europe
C. Oceania
D. Southwest Asia

A. Antarctica
Addressing the Issues

• Nuclear remediation is helping decontaminate islands in the region.

• Agreements to curtail overfishing have been implemented in some Pacific Island countries.

• The U.S. Environmental Protection Agency (EPA) has established programs to protect, restore, and maintain water quality around coral reefs.

• The World Wildlife Fund (WWF) is promoting conservation and development so that local people can benefit from their local resources.
### United States Nuclear Tests July 1945 through September 1992

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikini</td>
<td>23</td>
</tr>
<tr>
<td>Christmas Island</td>
<td>24</td>
</tr>
<tr>
<td>Enewetak</td>
<td>43</td>
</tr>
<tr>
<td>Johnston Island</td>
<td>12</td>
</tr>
<tr>
<td>Pacific</td>
<td>4</td>
</tr>
<tr>
<td>Total Pacific</td>
<td>106</td>
</tr>
</tbody>
</table>

ARE WE CHANGING THE PLANET?
STOP AND JOT

1.