## The Continents: Close-Up

A **continent** is a big mass of land. It is completely or mostly surrounded by water. There are seven continents. The continents make up just over 29% of the earth's surface.

#### Landmasses

- The continents are North America, South America, Europe, Asia, Africa, Australia, and Antarctica.
- Subcontinents: Greenland and the India-Pakistan area
- Microcontinents: Madagascar and the Seychelles Islands
- Oceania: Island groups in the Pacific Ocean

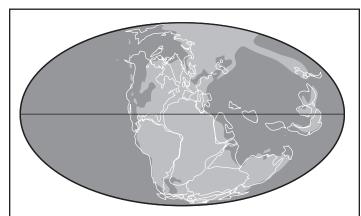


**The Continents Today** 

#### **How Were the Continents Formed?**

At one time, people believed the continents were formed by natural disasters. They blamed it on floods, earthquakes, and volcanoes. In 1596, Abraham Ortelius, said that the continents fit together like a puzzle. He said they had once been joined. Later, they were torn apart.

Alfred Lothar Wegener later wrote a book. In his book, he wrote about a new theory. He called his theory the "Continental Drift." He believed that the earth had once been one super continent. He named it Pangaea. This is a Greek word. It means "all lands." He believed that the large landmass was a lighter rock. It floated on a heavier rock. It would be like ice floating on water.



Wegener's theoretical continent, Pangaea, during the Permian Age (white outlines indicate current continents)

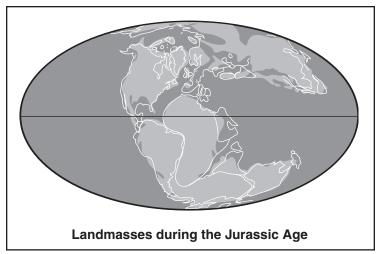
He believed that the big masses of land were still moving. They moved at a rate of about one yard each century. He believed that Pangaea existed in the Permian Age. It slowly divided into two parts. The upper part was named **Laurasia**. The lower part was named **Gondwanaland**.

By the Jurassic Age, the big masses of land had moved into seven continents. They "drifted" to where they are now.

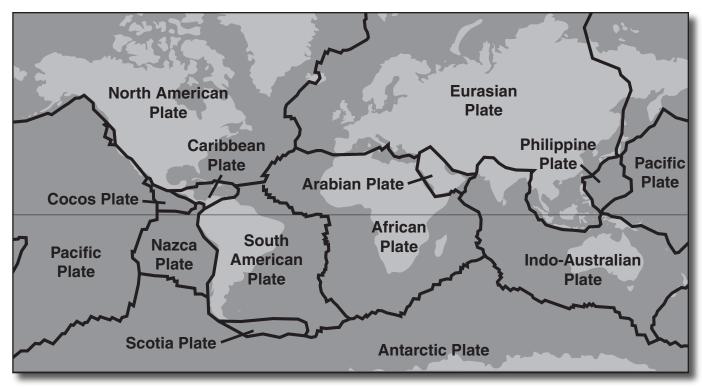
Most scientists agreed with this theory. In the 1960s, mountain ranges were found on the ocean floor. This suggested that the earth's crust was made up of about 20 slabs. These slabs are called **plates**.

This led to a new theory. The theory is known as "Plate Tectonics." It suggested that these plates move a few inches each year. The plates move apart, collide, or scrape against each other.

Scientists have found out that most volcanoes occur along the plate boundaries. Recently, there have been earthquakes



at the plate boundaries near Indonesia and Japan. These have caused tsunamis that killed hundreds of thousands of people. Scientists hope that further study will help them better understand the Earth's story.



The earth's crust consists of about 20 plates. Plate tectonics suggest that these plates move a few inches each year.

## The Continent of Europe: Close-Up

Europe is one of the seven continents. It is really part of the huge landmass called Eurasia. Most mapmakers agree on the border between Europe and Asia. It is the Ural Mountains, the Ural River, the Caspian Sea, and the Caucasus Mountains.

Europe is the second-smallest continent in size. However, it is the third-largest continent in population. Northern Europe is in the Arctic Circle. Southern Europe borders on the Mediterranean Sea. The western coast of Europe is on the Atlantic Ocean. The eastern border is the Ural Mountains



in Russia. The western part of **Russia** is included as part of Europe. The eastern area is part of Asia.

#### Islands

Great Britain is not joined to the continent. It consists of several islands. However, it is considered to be part of Europe. So are the islands of Crete, Iceland, Sardinia, and Sicily.

#### **Peninsulas**

Europe contains several **peninsulas**. Spain and Portugal form the **Iberian Peninsula**. Italy is a peninsula. The **Scandinavian Peninsula** includes Finland, Norway, and Sweden. Denmark is on the **Jutland Peninsula**.

#### **Mountains**

Europe has several mountain ranges. The Urals, Alps, and Pyrenees are three of the important ranges. **Mount Elbrus** is the highest point in Europe. It is in the Caucasus Mountains. One of its most famous mountains is **Mount Blanc**. It is on the border between France and Italy.

#### **Oceans and Seas**

Europe has coasts on the Atlantic Ocean, Caspian Sea, and the Mediterranean Sea. It also borders the Arctic Ocean, Baltic Sea, Black Sea, and the North Sea. Its lowest point is at the Caspian Sea.

#### **Rivers and Lakes**

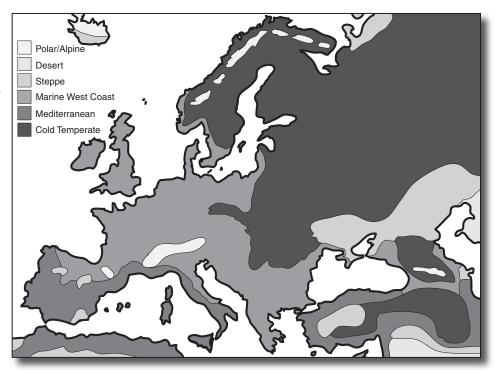
The **Volga** River is in Russia. It is the longest river in Europe. This river flows into the Caspian Sea. The Danube is the second-longest river. It flows into the Black Sea. Britain's most important river is the Thames. It flows into the North Sea. There are many lakes. Most can be found in the mountain regions. The largest freshwater lake is **Lake Ladoga** in Russia.

# Europe's Climate: Close-Up

Europe has two major climate zones. The western part of Europe has mild winters. The summers are cool. The southern region has mild, wet winters. The summers are hot and dry. Most of Europe gets from 20 to 60 inches (50 to 153 cm) of rainfall each year.

#### **Major Climate Zones**

 The Alps mountain range divides Europe into two major climate zones. Warm, moist



breezes blow off the Atlantic Ocean to Europe. These winds have an impact on the climate north of the Alps. They help to keep the climate moderate and provide rain throughout the year. This type of climate is sometimes called a **marine west coast climate**. Europe has more of this type of climate than the rest of the continents combined.

• The Alps block the ocean breezes from reaching the southern part of the continent. It also blocks the cold arctic winds coming from the north each winter. This creates a **Mediterranean climate**. This type of climate has warmer winters and hot, dry summers. Greece, Italy, and Spain have a Mediterranean climate. Almost all of the rainfall in this climate zone is during winter.

#### Other Climate Zones

- In Romania and Bulgaria near the Black Sea, there is a humid continental (warm summer) climate. From Poland eastward and north into southern Sweden and Finland, the climate is known as humid continental (cool summer). It is cooler and drier. This region does not get much of the warming and rain effects from the seas.
- The northern parts of Europe also have cooler and drier weather. The mountains of Norway block the ocean breezes. This causes much of eastern Norway, northern Sweden and all of Finland to have subarctic climates. Many of the mountains of Norway are ice-covered. There are many glaciers. These glaciers often empty into Norway's famous fjords. The northernmost regions of Norway and Finland have polar climates. This causes tundra soil conditions.
- Europe has small regions of steppe, subtropical, and highland climates. Parts of Spain contain the steppe climate. These grassy regions were made famous as the location of Cervantes' book *Don Quixote*. A subtropical climate is found in northern Italy. Regions covered by mountains such as the Alps have highland climates.

## **Europe's Resources and Industries: Close-Up**

Europe has many natural resources. This has helped to develop its many industries. Several groups have been formed to improve trade. One of these groups was the **European Union**. On January 1, 2002, twelve European countries agreed to use the **Euro** as their money. This was done to make trade easier between the nations.

#### Agriculture

In Europe, one of the main industries is **agriculture**. Many types of crops are grown. Animals are raised. In western Europe, dairy and meat are the main products. Crops are mostly grown in eastern Europe. Wheat, olives, grapes, and citrus fruits are the main crops grown in the Mediterranean regions. Some of the other European crops are barley, beans, corn, oats, and rye. All over Europe, poultry, cattle, goats, pigs, and sheep are raised.



#### **Forestry**

Northern Europe has large areas of forests. The trees are cut down and used to make lumber and other products. The **wood pulp** is used for papermaking. Both Spain and Portugal produce many types of **cork** products.

#### **Fishing**

Many fish are caught along the coast of Europe. Britain, Denmark, Norway, Poland, and Spain all have major fishing industries.

#### Mining

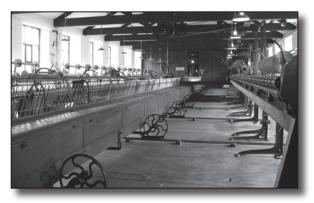
Coal and iron ore are mined in Europe. Oil and natural gas have been part of southern Russia's economy for several years. There are major fields of oil and natural gas in the **North Sea** region.

#### Manufacturing

Europe was a leader in manufacturing during the **Industrial Revolution**. Cloth and ships are items that are still being made. The production of chemicals and electronics is increasing greatly.

#### **Transportation**

The **transportation** systems in Europe are very good. There are many railways and highways. Europe's airports are among the busiest in the world. There are many major seaports for shipping. It also has rivers and canals to help with the transport of people and goods.



## **Europe's Animal Life: Close-Up**

Europe does not have the wide range of animal life that it once did. People have lived in much of Europe for a long time. This has been harmful to the animal life. Many species of animals have become reduced in numbers or died out.

#### **Mammals**

- Wild herds of deer and elk and groups of bear and wolves can only be found in far northern regions of Scandinavia and Russia. The **chamois** is a small goatlike antelope. The **ibex** is a type of wild goat. Both of these animals are still found in the Pyrenees and Alps mountain ranges.

**Reindeer Used for Transportation in Russia** 

- Herds of tame reindeer live in Lapland. Lapland includes Finland and the northern parts of Norway and Sweden and part of Russia. A reindeer provides both milk and meat. The Lapps once used reindeer hides to make their shelters. Reindeer are also used to pull sleds. They can cross arctic wastelands at about ten miles per hour.
- Europe is still home to many types of small animals. Foxes, hares, mice, rabbits, and squirrels are still found in large numbers.
- Farmers all over Europe raise cattle, goats, sheep, and pigs. The meat from these animals
  is used for food. Belgium, Denmark and France are known for their fine cheeses. They use
  cow and goat milk. Sheep wool is used by the textile industries. The British Isles are noted
  for their fine woolen products.

#### **Birds**

- Some of the birds found in Europe are eagles, owls, and pigeons.
  Pigeons are used as food in many countries. Swans live on many of the
  rivers and lakes. Storks live in the Low Countries and Scandinavia. The
  Low Countries are Belgium, the Netherlands, and Luxemboug. Storks
  are considered a sign of good luck.
- Several nations have **poultry** industries. They raise chickens, ducks, turkeys, geese, and other birds for meat and eggs.

#### Fish

 The large fishing industry includes catches of cod, haddock, herring, and mackerel. Many types of salmon live in the rivers of Europe. Sturgeon live in the Black and Caspian Seas. Caviar comes from sturgeon. Portugal is one of the world's major providers of sardines.



Stork

Perhaps Europe's most famous animal is the legendary **Loch Ness Monster**. Many people believe that it is a large sea creature that lives in Loch Ness, a lake in Scotland. There is no proof that it exists. The first reported sighting of the monster goes back as far as A.D. 565.

## The People of Europe: Close-Up

There is proof that humans lived in what is now Europe over 6,000 years ago. The earliest people of the region came from Asia.

Most Europeans come from the Indo-European race. The landforms of Europe divided these early people into separate groups for many years. These groups built strong common cultures or national identities. Often these groups became known as different ethnic groups.



The number of people living in Europe had The Arbëreshë are a minority ethnic group from Albania who live in southern Italy.

#### **Population**

remained steady for many years. It began declin-

ing by the year 2000. More people moved from rural areas into cities during the 20th century. Europe has a larger density of population than any of the other continents. This means there are more people living in a square mile than in other continents. It has twice as many people as the United States.

#### Language

Europe has about 50 spoken languages. Most of these belong to the Indo-European language family. There are three major branches. Most people in eastern Europe speak the Balto-Slavic languages. These include Russian, Polish, and Czech. The Germanic-based languages are spoken in northern nations. German, English, and Swedish are examples. The Romanticbased languages are spoken in southern Europe. These include Italian, French, and Spanish.

Many people living in Europe speak more than one language. English or French is the second language of many Europeans.

#### Religion

The largest religious group in Europe is Roman Catholic. Protestant Christian faiths are found in northern and central Europe. Orthodox Christians form the third-largest group. There are Jewish communities throughout the continent. Albania and Turkey are mostly Muslim nations.

#### Education

Most European nations have good schools. Most people can read and write. Many well-known universities are in Europe.

#### **Health Care**

Europe is also known for its fine health care services. Europeans live longer on average than people on any other continent.



## **European Culture: Close Up**

Europe was the birthplace of what is known today as **Western Civilization**. Europe is still an important cultural center of the world. It is famous for its museums, theaters, opera houses, and art galleries.

#### Architecture

The Parthenon in Athens and the **Colosseum** in Rome were built in ancient times. In Medieval times, craftsmen built the great cathedrals. They were built with arches and windows with stained glass.

#### **Painters and Sculptors**

Many of the world's greatest painters and sculptors came from Europe. One **Renaissance** artist was Leonardo da Vinci. He painted the *Mona Lisa*. This may be the world's most famous painting. The *Mona Lisa* hangs in the **Louvre** in Paris. It is one of the most famous art museums in the world.

#### Music

Music was important in the ancient cultures of Europe. The chants used in churches in the **Middle Ages** are still sung today. The Renaissance brought major changes to music. **Opera** was introduced in Italy. It soon spread to the rest of Europe. A few of the important composers are Bach, Mozart, and Beethoven. Europe went on to play a major role in the music of the 20th century.

#### Dance

Dance has always been an important part of the arts in Europe. The **ballet** was developed in France. Later, the **waltz** groups still perform traditional folk dances.



**Opera House in Paris, France** 

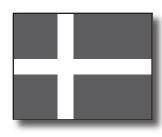
was developed in France. Later, the **waltz** was made famous in Vienna. Many European ethnic

#### Literature

Europe was home to many famous authors. The ancient Greek poet **Homer** wrote two of the world's classics. The names of the poems are the *Iliad* and the *Odyssey*. Other authors include France's Hugo and Dumas, Italy's Machiavelli, and England's Dickens. The most important European author may have been **William Shakespeare**. Each year, his plays are performed more often than any other **playwright**, living or dead.

## Scandinavia: Close-Up

**Scandinavia** is the name often used for the countries of Northern Europe. These countries are Denmark, Finland, Iceland, Norway, and Sweden. The countries are mostly surrounded by water. All of the countries have major fishing industries.



**Denmark** has the smallest area of land but the second-largest population of this group of countries. It also has the mildest climate. It has the best soil. Dairy products, meats,

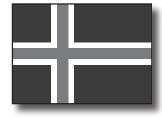
poultry, and eggs are exported. Manufacturing is its largest industry. Denmark imports many raw materials. These materials are used to make

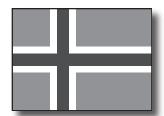


items that will be exported. The capital city is Copenhagen. Denmark is a parliamentary monarchy.

Finland was once ruled by Denmark, Sweden, and Russia. It gained its freedom in 1917. It is very cold. The soil is very poor. Wood and wood products provide over one-half of Finland's exports.

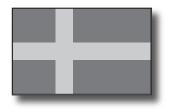
lceland is an island. It is not part of the continent of Europe. However, it is usually included as a European country. Iceland is made of volcanic rock. It is the westernmost part of Europe. It lies just south of the Arctic Circle. Most of Iceland's settlers came from Denmark and Norway. Less than 2% of its land is farmed. Over 80% of the exports are based on the fishing industry.





**Norway** gained its freedom from Sweden in 1905. It is a constitutional monarchy. Norway has many mountains. It has very little land for farming. Norway has one of the world's largest fishing industries. It produces large amounts of **hydroelectric power**. There is oil and natural gas in Norway's offshore regions.

**Sweden** is governed by a constitutional monarchy. There are farming and dairy industries in the southern region. Sweden makes stainless steel, furniture, and glassware. Forest and woodland cover over 60% of the country. Sweden also has large deposits of iron, copper, and lead.



### The British Isles: Close-Up

The British Isles are not joined to the continent of Europe. Even so, they are always included as part of Europe. The largest islands are Britain and Ireland. There are also many smaller islands.

The British Isles have two major countries. They are the Republic of Ireland and the United Kingdom. The **United Kingdom** is also known as **Great Britain**. The major units of the United Kingdom (UK) are England, Scotland, Wales, and Northern Ireland.

Great Britain is a democratic parliament. It still has a monarchy. Queen Elizabeth II is Great Britain's monarch. London is the capital of the United Kingdom. It is on the Thames River. The location of London has made it a major port. It also has been a center of business for hundreds of years.

In 1588, the English navy defeated the Spanish navy. England then became a major world power. During the Industrial Revolution, Great Britain became a major manufacturing center.



At one time, Great Britain had colonies located all over the world. A famous saying for many years was that "the sun never sets on the British Empire." At one time, Great Britain ruled the



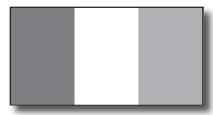
American colonies. The colonies gained independence in the Revolutionary War. Other British colonies gained their freedom after World War II.

**England** takes up the largest part of the island of Britain. It is also the political, economic, and cultural center of the United Kingdom

**Scotland** is located to the north of England. It is noted for its highlands. Major industries are the raising of sheep, cattle, and horses. There are large oil and gas deposits in the North Sea. This has helped to boost the economy.

**Wales** borders England on the west. The land is very rugged. It has large coal deposits. The major industries are coal mining, fishing, and farming.

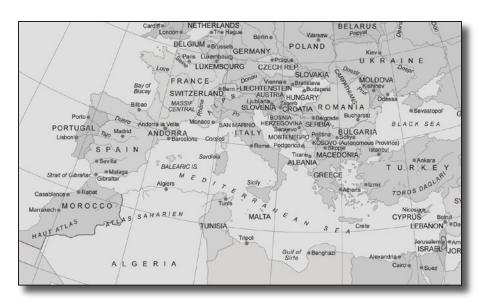
**Northern Ireland** is part of the United Kingdom. It is not part of the Republic of Ireland. Most of the Protestants want to remain as part of the United Kingdom. Most of the Catholics want to become part of the Republic of Ireland.



The Republic of Ireland broke away from the rule of Great Britain in 1920. It became a nation in 1949. It takes up five-sixths of the island of Ireland. Dublin is its capital. Farming is the leading industry. In addition to crops, the Irish raise sheep, beef cattle, and horses. There are also some factories in Ireland.

# Southern Europe: Close-Up

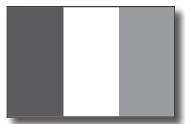
The countries of Southern Europe include Greece, Italy, Portugal, and Spain. Except for Portugal, all the countries of the region border the **Mediterranean Sea**. They all share the warm and dry Mediterranean climate.



All the southern European countries are on **peninsulas**. Spain and Portugal are on the Iberian Peninsula. Both Italy and Greece are on individual peninsulas.



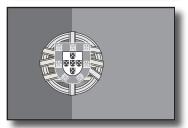
**Greece** has many mountains. It also includes many islands. Crete is the largest island. Only a small part of Greece can be farmed. Greek farmers do raise wheat, corn, and cotton. Some of the main exports are citrus fruits, figs, grapes, and olives. Athens is the capital city. Greece has many ancient sites. This makes tourism a major industry.



Italy is a peninsula. It is shaped much like a boot. The large islands of Sardinia and Sicily are part of Italy. Rome is the capital city. In ancient times, it was the center of Western Civilization. Italy is still a major force in Europe's culture and economy. Farming is a major industry in Italy. Two other industries are tourism and the growing of grapes for wine.



**Spain** takes up most of the Iberian Peninsula. It is bordered by the Mediterranean Sea and the Atlantic Ocean. The Pyrenees Mountains are to the north. They separate Spain from France. For years, farming has been a major industry. Wheat and barley are the main crops. Manufacturing is now more important to the economy than farming. Three major exports are paper, iron, and steel.



**Portugal** was once a major world power. Today, it is one of Europe's least-developed nations. It shares the Iberian Peninsula with Spain. Two of the major crops are grains and olives. A major industry is the making of leather goods.

## **Eastern Europe: Close-Up**

The nations of Eastern Europe have fewer industries than the rest of Europe. At one time, they had strong ties to the former Soviet Union. Some of the Eastern European nations are listed here.

**Albania** has many mountains. This has kept it isolated from the rest of the world. It is mostly a farming country. It grows almost all the food needed by its people. The major crops are wheat, corn, and potatoes. There are also large herds of sheep and cattle.

Bulgaria is mountainous and has few resources. It grows grains, fruit, and tobacco. Iron, steel, and textiles are important to its economy. Bulgaria is closely tied to Russia. There has been fighting among ethnic groups.

**The Czech Republic** was formed when Czechoslovakia was divided into two countries. The Czech Republic and Slovakia were formed on January 1, 1993. Prague is the capital city. It is also the largest city. Some of the main industries are farming, iron, and steel.

Hungary has a mild climate. It has rich soil that is good for growing crops. Some of the main crops are

wheat, corn, and potatoes. Farmers also raise pigs and cattle. Farming was the major industry until the last few years. Recently, mining, chemicals, and electronics have become important in the economy. Budapest is the capital. It is also the largest city.

**Poland** is one of the largest of the Eastern European countries. The capital city is Warsaw. It is a major industrial center. Two of the main industries are iron and steel. Some of the main crops grown are wheat and rye. Poland's Communist rule ended in 1989. Free elections were held in 1991.

Romania has a varied landscape. Its main industry is farming. Some of the major crops grown are corn,

grapes, and wheat. Oil, iron, and steel have recently become an important part of the economy. Romania is the home of the legendary Count Dracula.

Slovakia had been a province of Czechoslovakia until the country was divided into two parts. It is

smaller in size than the Czech Republic. It also has fewer people. There are few industries. The Carpathian Mountains cover almost one-fourth of the nation.

In 1991, the country of Yugoslavia split up to become several separate nations. The countries are now **Bosnia and Herzegovina**, **Croatia**, **Macedonia**, **Slovenia**, **Serbia**, and **Montenegro**. Kosovo has also declared its independence. It has not yet been recognized by all nations. There are many different ethnic groups in this region. That has led to wars among the different groups. Some of the main crops grown in the region are corn, wheat, and potatoes. Recently, industries such as chemicals, textiles, and machinery have become more important.

## Western Europe: Close-Up

Western Europe is known for its major industrial and commercial centers and high standards of living. It is also famous for its great cities. They are known as cultural centers.



Austria has long been a link between the eastern and western parts of Europe. Both the Alps mountain range



and the Danube River are part of the na-

tion. The capital city is Vienna. It has long been a cultural center. Tourism is one of its main industries.



**Belgium** has many industries. Two of the main industries are metals and coal. It is also known for making fine pianos and chocolate. Farming is a small part of the economy. Belgium raises enough food to meet the needs of its people. There are two major ethnic groups. One group is the Flemish in the north. The other group is the Walloons in the south.

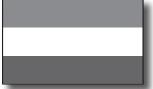
**France** is the oldest and largest nation in Western Europe. It has borders on the Mediterranean Sea,

Atlantic Ocean, English Channel, and the North Sea. The capital city is Paris. It is one of the world's most important cities. France has many industries. Some of the major industries are cars, equipment, and textiles. It is also famous for its cheeses and wines.



**Germany** was not united as a country until 1871. It was divided into two countries after World War II. The two countries were reunited in 1990. Some of the main exports are steel, ships, and vehicles. Two of the main farming products are potatoes and sugar beets.

Luxembourg has only 965 square miles (2,499 sq. km) of land. There are many people living on this small area of land. There are many industries. It must rely on a great deal of trade. Steel has long been a major industry. German is its main language. French is used for government affairs.



The Netherlands are famous for land reclaimed from the sea. More than 40% of the current land was at one time under the North Sea. Dikes were built and then the land behind the dikes was drained. Windmills were used to pump out the water. Cheese, tulips, and meat are

the main exports.

**Switzerland** is famous for its Alps. These mountains cover much of the country. The mountains and its land-locked location have helped Switzerland remain a **neutral** nation. This has helped it to avoid wars through most of its history. It is known for making cameras and watches.



# **Europe's Smallest Nations: Close-Up**

Europe has six of the world's smallest nations. Each has less than 200 square miles (518 sq. km) of land.

**Andorra** has 180 square miles (466 sq. km) of land. It is in the Pyrenees Moun-



tains between France and Spain. It has a democratic government. Major decisions must be approved by France and Spain.

Andorra's major industries are tourism and **duty-free** shopping.





**Liechtenstein** has 62 square miles (161 sq. km) of land. It is home to 30,000 people. It is ruled by a prince. He must get the parliament's approval for any laws he wants to put in place. Major parts of the economy are agriculture, commerce, and light industry. The nation has strong ties to Switzerland. Many companies locate home offices in this country because of low taxes.

Malta is an island of 122 square miles (316 sq.

km). It is in the middle of the Mediterranean Sea. Malta was ruled by the British for many years. It gained its freedom from British rule in 1964. It was a strategic port during World War II. Two of the main industries are shipbuilding and tourism.



**Monaco** has less than one square mile (2.59 sq.

km) of land. It is on the coast of the Mediterranean Sea. It is surrounded on three sides by France. It is noted for its mild climate and beautiful scenery. Monaco has no farming. Tourism is its main industry. Monaco became famous around the world in 1956 when its prince married Grace Kelly. She was an American film star.

San Marino is a nation of 24 square miles (62 sq. km) of land. It is bordered by Italy on all sides. The pope granted it independence in 1631. When Italy was united as a single country, San Marino kept its independence. Most of the people work at farming or in light industry. Today, tourism and the sale of its stamps and coins are a main industry.



The Vatican is the smallest independent state in the

world. It is also known as Vatican City and the Holy See. It covers just over 100 acres (40 hectares) of land. It is the center of the Roman Catholic Church. This is where the **pope** lives.

