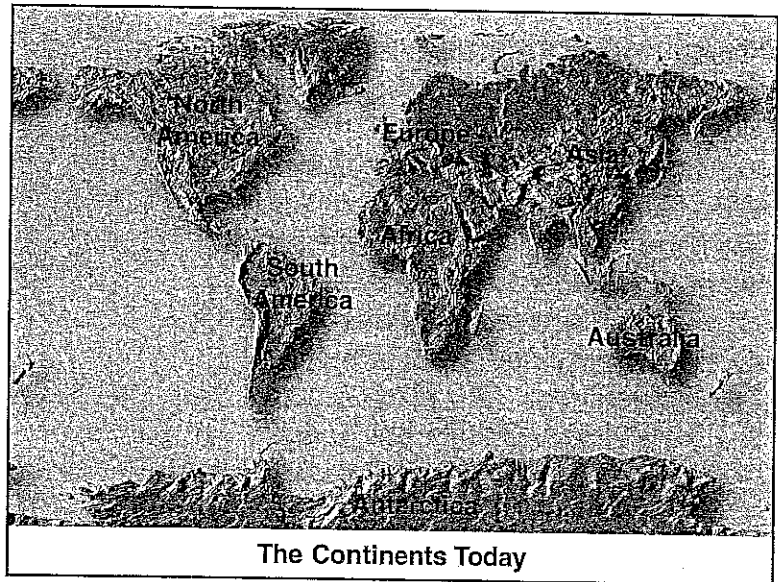


The Continents

A continent is a large landmass completely or mostly surrounded by water. Geographers list seven continents: North America, South America, Europe, Asia, Africa, Australia, and Antarctica. Greenland and the India-Pakistan area are sometimes referred to as "subcontinents." Madagascar and the Seychelles Islands are often called "microcontinents." The island groups in the Pacific Ocean are called "Oceania," but they are not considered a continent.

The continents make up just over 29 percent of the earth's surface.

They occupy about 57,100,000 square miles (148,000,000 sq. km). More than 65 percent of the land area is in the Northern Hemisphere.

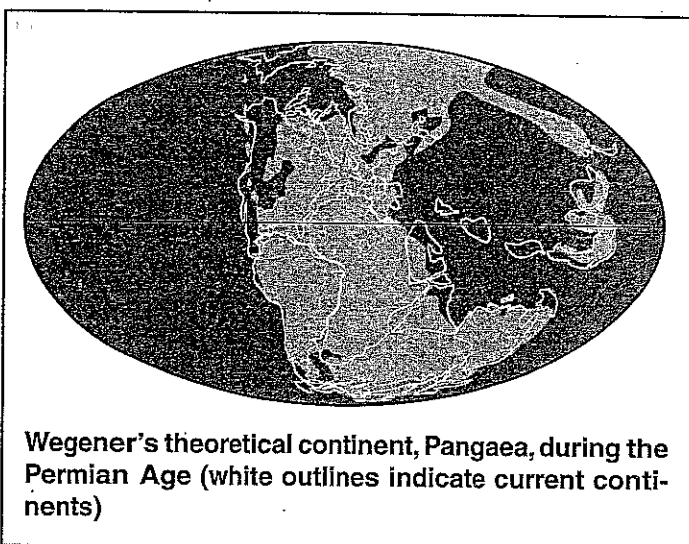


The Continents Today

HOW WERE THE CONTINENTS FORMED?

For many years, Europeans believed the continents were formed by a catastrophe or series of catastrophes, such as floods, earthquakes, and volcanoes. In 1596, a Dutch mapmaker, Abraham Ortelius, noted that the Americas' eastern coasts and the western coasts of Europe and Africa looked as if they fit together. He proposed that once they had been joined but later were torn apart.

Many years later, a German named Alfred Lothar Wegener published a book in which he explained his theory of the "**Continental Drift**." Wegener, like Ortelius, believed that the earth



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

originally had one super continent. He named it **Pangaea** from the Greek word meaning "all lands." He believed that the large landmass was a lighter rock that floated on a heavier rock, like ice floats on water.

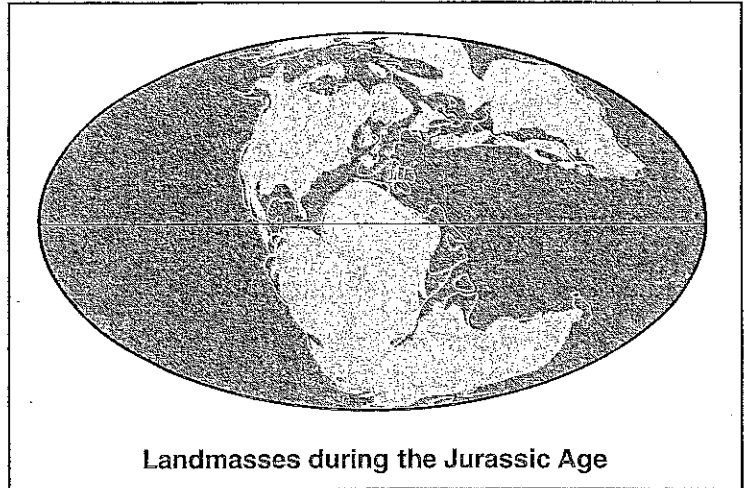
Wegener's theory stated that the landmasses were still moving at a rate of about one yard each century. Wegener believed that Pangaea existed in the Permian Age. Then Pangaea slowly divided into two continents, the upper part, **Laurasia**, and the lower, **Gondwanaland**, during the Triassic Age.

By the Jurassic Age, the landmasses had moved into what we could recognize as the seven continents, although they were still located near each other. Eventually, the continents “drifted” to their present locations.

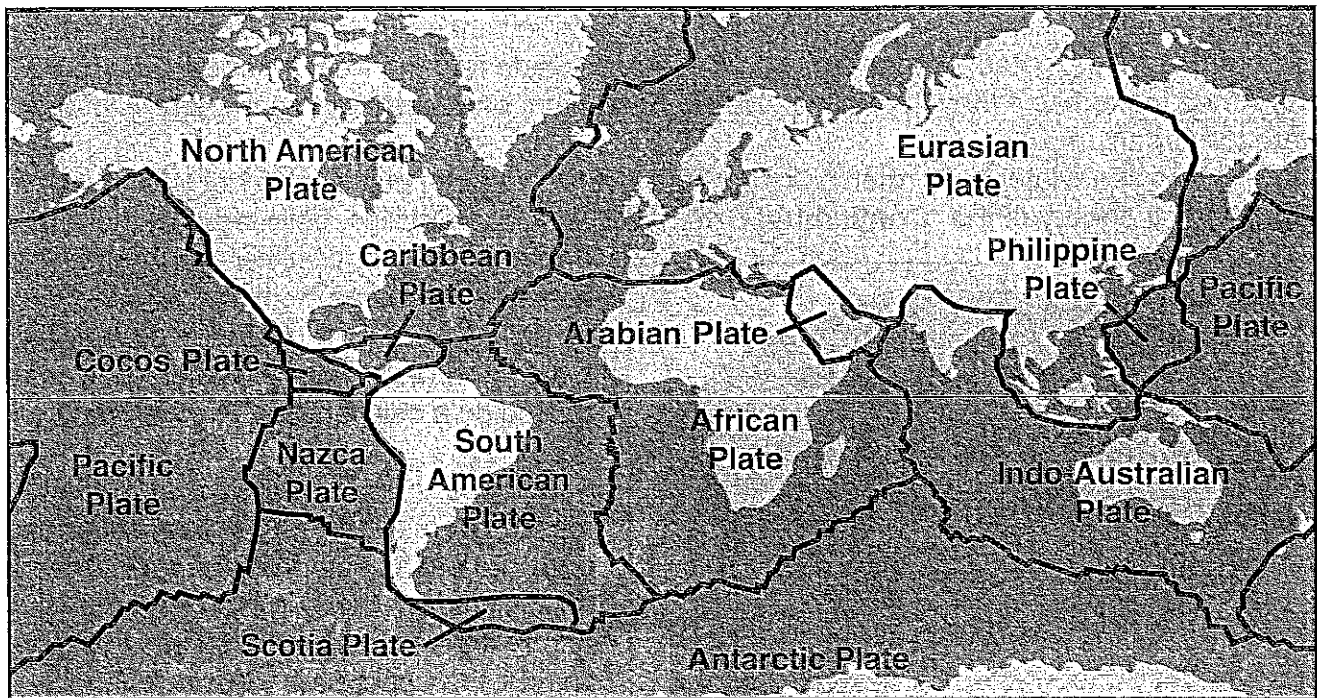
Most scientists had been in agreement on the continental drift theory until researchers in the 1960s discovered several major mountain ranges on the ocean floor. These mountains suggested that the earth’s crust consists of about 20 slabs or **plates**.

These discoveries led to a new theory, “**Plate Tectonics**,” which has become more popular. This theory suggests that these plates move a few inches each year. In some places the plates are moving apart, while in others the plates are colliding or scraping against each other.

Scientists also discovered that most volcanoes and earthquakes occur along the boundaries of the various plates. They hope that further study will help them increase their understanding of Earth’s story.



Landmasses during the Jurassic Age



The Tectonic Plates

Name: _____ Date: _____

Questions for Consideration

1. What is a continent? _____

2. The continents make up what percentage of the earth's surface?

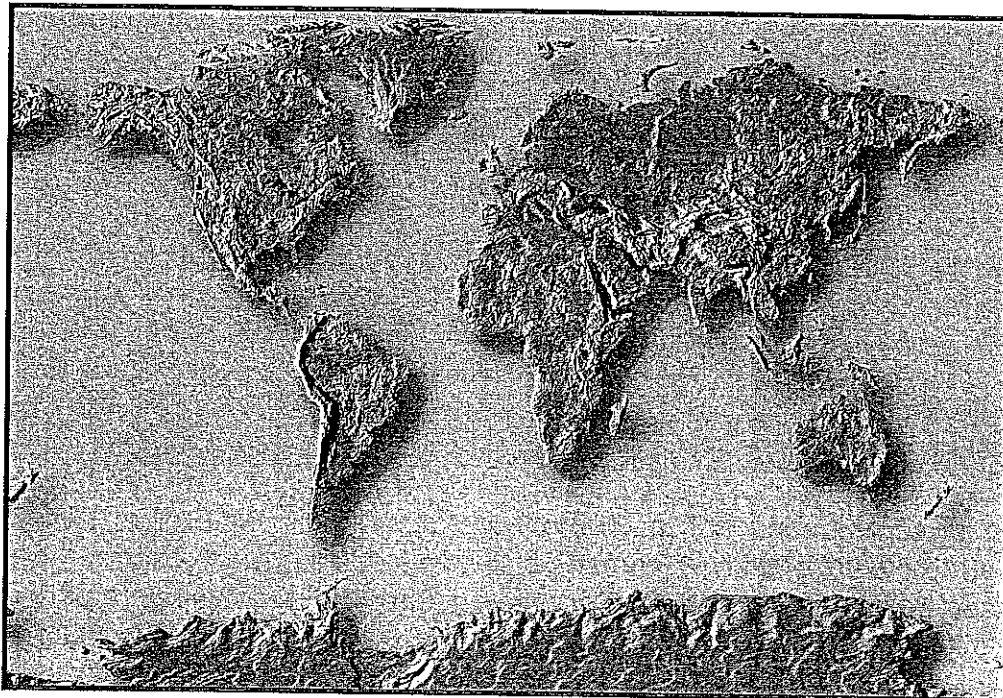
3. What was the name of Wegener's theory?

4. What is the name of the newer theory that replaced Wegener's?

5. What two natural happenings occur near the boundaries of the plates?

Map Project

On the map below, label all seven of the continents.



Name: _____ Date: _____

Outline Map of Europe



The Continent of Europe

Europe is one of the seven continents. It is actually part of the huge land-mass of Eurasia. Most geographers agree that the border between Europe and Asia is the Ural Mountains, the Ural River, the Caspian Sea and the Caucasus Mountains.

Technically, Great Britain is not part of the continent. It consists of several islands. However, it and the islands of Crete, Iceland, Sardinia, and Sicily are usually considered to be part of Europe. The western part of Russia is included as part of Europe while the eastern area is part of Asia.

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

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

Three of Europe's mountain ranges, the Carpathians, the Caucasus, and the Urals, are in Russia. Another European mountain range is the Alps, located in Switzerland, France, Austria, Germany, Italy, and Yugoslavia. The Pyrenees form the border between France and Spain, and the Dolomites are in Italy.

Europe's highest point is Mount Elbrus (18,510 ft. or 5,642 m) in the Caucasus Mountains of Russia. Its most famous mountain is Mount Blanc (15,771 ft. or 4,807 m) on the border between France and Italy. Its lowest point is at the Caspian Sea (92 ft. or 28 m below sea level).

In addition to its coasts on the Atlantic Ocean, Caspian Sea, and the Mediterranean Sea, Europe has borders on the Arctic Ocean, Baltic Sea, Black Sea, and the North Sea.

The Volga, in Russia, is Europe's longest river. It flows into the Caspian Sea. The Danube, Europe's second-longest river, flows into the Black Sea. The Rhone and Po flow into the Mediterranean Sea. The Elbe and Rhine enter the North Sea. The Loire and Seine flow into the Atlantic Ocean. Britain's most important river, the Thames, flows into the North Sea.

Europe has numerous lakes, especially in the mountain regions. Its largest freshwater lake is Lake Ladoga in Russia.



Name: _____ Date: _____

Questions for Consideration

1. What large country is located in both Europe and Asia?

2. What is the only continent smaller than Europe?

3. What is the name of the peninsula on which Spain and Portugal are located?

4. What is Europe's most famous mountain?

5. What is Europe's longest river?

Map Project

Using an atlas or globe and the outline map of Europe (located on page 4), label the following:

Bodies of Water:

Arctic Ocean
Atlantic Ocean
Black Sea
Caspian Sea
Mediterranean Sea
North Sea

Mountain Ranges:

Alps
Carpathians
Caucasus
Pyrenees
Urals

Peninsulas:

Iberian
Italian
Jutland
Scandinavian

DID YOU KNOW?

A lake is a body of water surrounded by land. Technically, the Caspian Sea, on the border between Europe and Asia, is a lake and not a sea. It is the world's largest lake.

Europe's Climate

Europe has two major climate zones. The western part of the continent has mild winters and cool summers. The southern region has mild, wet winters and hot, dry summers.

The Alps mountain range divides Europe into the two major climate zones.

The climate north of the Alps is influenced by warm, moist breezes from the Atlantic Ocean. These breezes help keep the climate moderate and provide precipitation throughout the year. This

climate is sometimes referred to as the **marine west coast climate**. Europe has more of this type of climate than the rest of the continents combined.

The Alps mountain range blocks 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** with warmer winters and hot, dry summers.

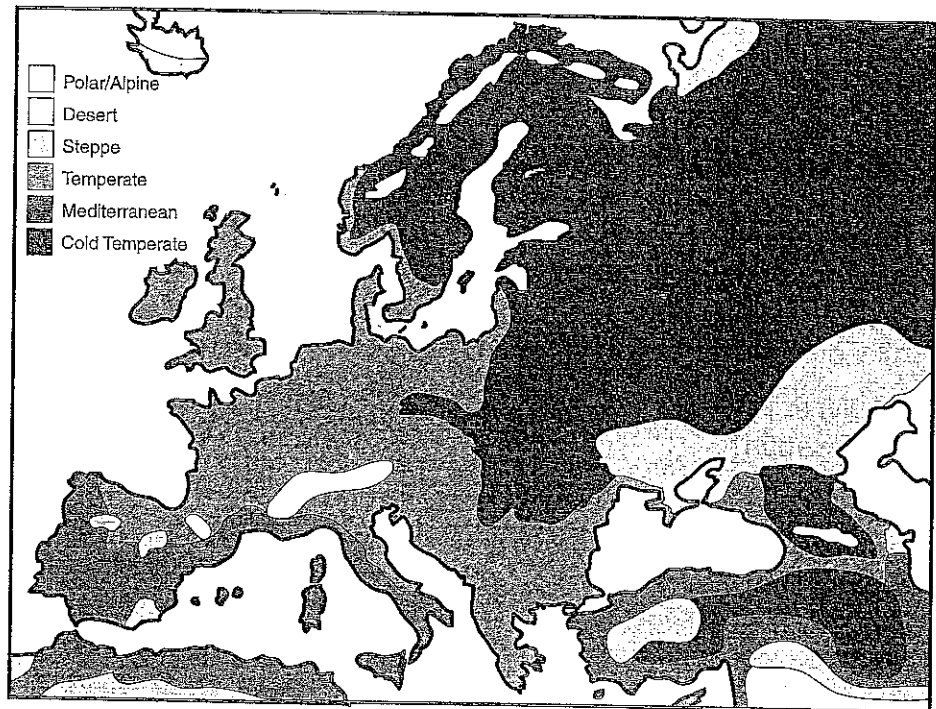
Greece, Italy, and Spain have a Mediterranean climate. Almost all of the rainfall in the Mediterranean climate occurs during winter.

From Poland eastward and north into southern Sweden and Finland, the climate is classified as **humid continental**. It is cooler and drier. This region does not have much of the warming and rain effects of the seas.

The northern parts of the continent also have cooler and drier conditions. The mountains of Norway block the ocean breezes, so much of eastern Norway, northern Sweden and all of Finland have **arctic climates**. Many of the mountains of Norway are ice-covered and have glaciers. These glaciers often empty into Norway's famous fjords. The northernmost regions of Norway and Finland have **polar climates** causing 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 region of **subtropical climate** is in northern Italy and parts of Bosnia-Herzegovina, Croatia, and Slovenia. The Alpine regions of Austria, France, Germany, Italy, and Switzerland all have **highland climates**.

Most of Europe receives from 20 to 60 inches (508 to 1,524 mm) of precipitation each year.



Europe's Climate Regions

Name: _____ Date: _____

Questions for Consideration

1. What is the main European climate type located north of the Alps?

2. What is the main European climate type located south of the Alps?

3. What is the climate type in eastern Poland and southern Sweden?

4. What part of Europe contains steppe climate?

5. What climate type is located in the Alpine region?

DID YOU KNOW?

The Matterhorn is one of the most famous mountains in the Alps. It is a difficult mountain to climb. The first human climbed to its peak in 1865.

Climate Zones

Describe the following terms. Use a dictionary if you need help.

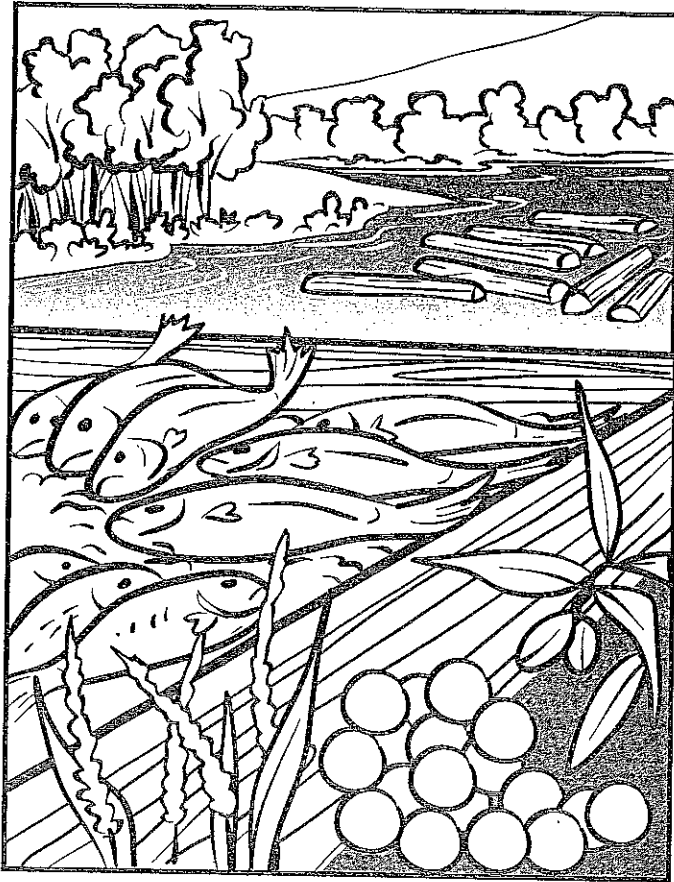
Tundra: _____

Glacier: _____

Fjord: _____

Arctic Circle: _____

Europe's Resources and Industries



Europe has a wide variety of industries and natural resources.

Agriculture is one of Europe's major industries. The continent is self-sufficient in most regions. Its farmers produce a variety of crops and animal products.

In western Europe, dairy and meat products dominate. In eastern Europe, crops become more important. In the Mediterranean regions, wheat, olives, grapes, and citrus fruits are the major crops. Other major European crops include barley, beans, corn, oats, potatoes, and rye. In addition to poultry products, herds of cattle, goats, pigs, and sheep are common throughout the continent.

Northern Europe, especially Sweden, Norway, Finland, and Russia, has a large forestry industry. Products include wood pulp for papermaking as well as lumber and other building products. Both Spain and Portugal produce a variety of cork products.

Fishing is important along all of Europe's coasts. Britain, Denmark, Norway, Poland, and Spain all have major fishing industries.

Mining has become less of a major industry in Europe than in the eighteenth and nineteenth centuries. However, large quantities of coal and iron ore are still mined there. Other minerals mined in Europe include bauxite, copper, manganese, nickel, and potash. Oil and natural gas have been part of southern Russia's economy for several years. In recent years, major fields of oil and natural gas have been developed in the North Sea region.

Europe was a leader in the development of manufacturing during the Industrial Revolution. Major production centers developed throughout Britain, Germany, France, Poland and the Ukraine. Metal products, textiles and clothing, ships, automobiles, and railroad equipment are still important industries. In recent years, Europe's chemical and electronic industries have increased greatly.

Europe has well-developed transportation systems. It has a major railway system, large fleets of merchant ships, and an extensive system of highways. Most countries have national airlines, and Europe's airports are among the world's busiest. The continent has many major seaports, as well as important inland rivers and canals.

Europe's governments created several organizations to improve trade, such as the European Union and the European Free Trade Association. On January 1, 2002, twelve European countries adopted the Euro as their common currency.

Name: _____ Date: _____

Questions for Consideration

1. What are the main agricultural products in western Europe?

2. Which European countries are noted for producing cork products?

3. What resources have been developed in the North Sea region?

4. When did Europe first become a leader in manufacturing?

5. What major currency began being used on January 1, 2002?

Matching

Match the following products with a country or region that produces them.

- | | |
|-------------------------|----------------------------|
| _____ 1. Citrus fruits | A. Denmark |
| _____ 2. Cork | B. Finland |
| _____ 3. Crops | C. Russia |
| _____ 4. Dairy products | D. Spain |
| _____ 5. Fishing | E. Eastern countries |
| _____ 6. Forestry | F. Western countries |
| _____ 7. Meat products | G. Mediterranean countries |
| _____ 8. Natural gas | |
| _____ 9. Oil | |
| _____ 10. Olives | |

DID YOU KNOW?

The Euro is the first common currency used in most of Europe since ancient Roman times.

