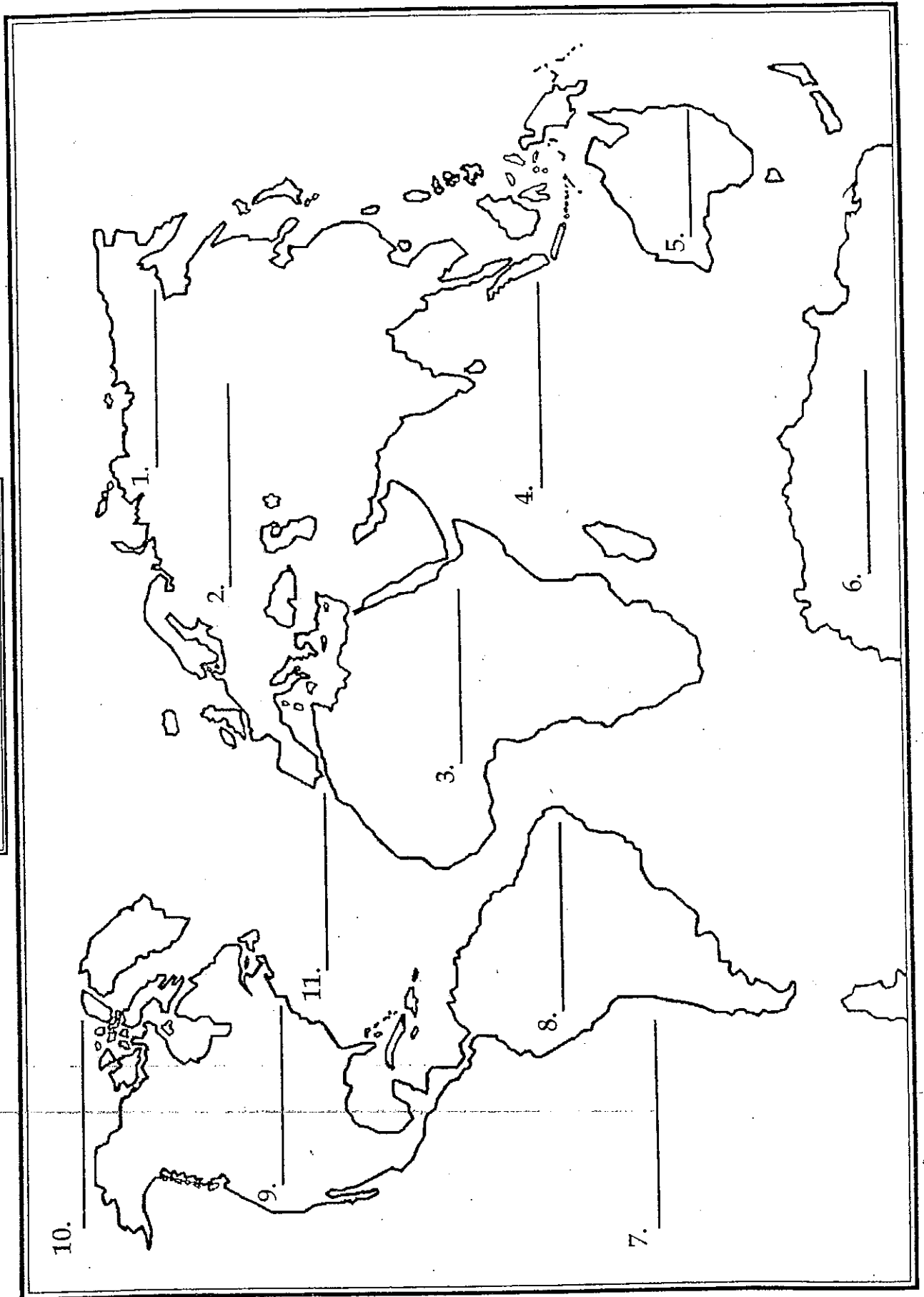


Name: \_\_\_\_\_

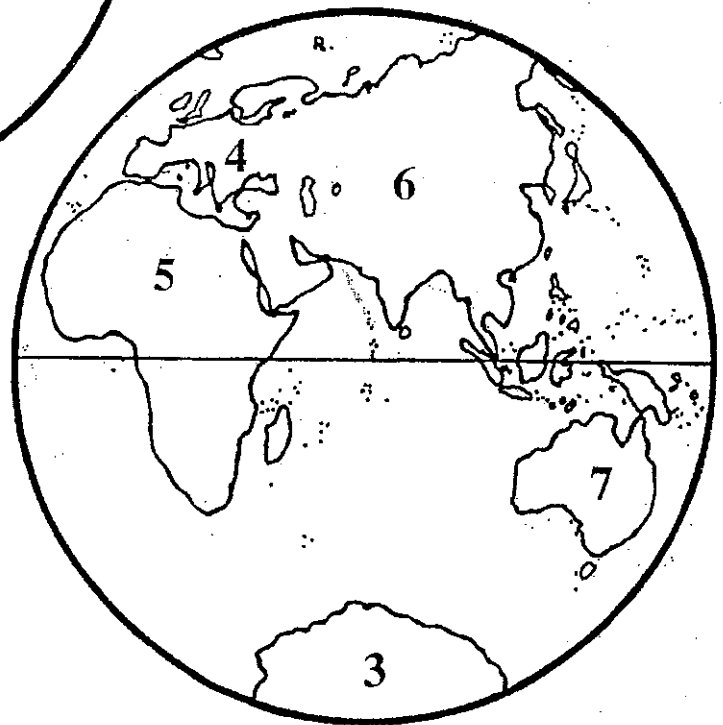
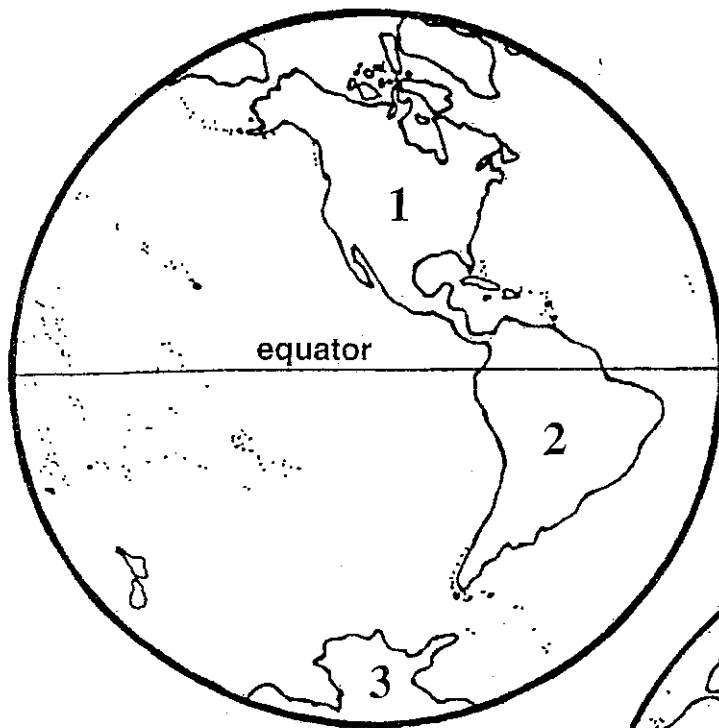
The World



# The Equator and Hemispheres

The Earth is divided into two parts by an imaginary line called the *equator*. The part of the Earth that is north of the equator is called the *Northern Hemisphere*. The part of the Earth that is south of the equator is called the *Southern Hemisphere*.

The equator is like an imaginary cut that divides the sphere of the Earth into two half spheres, or hemispheres.



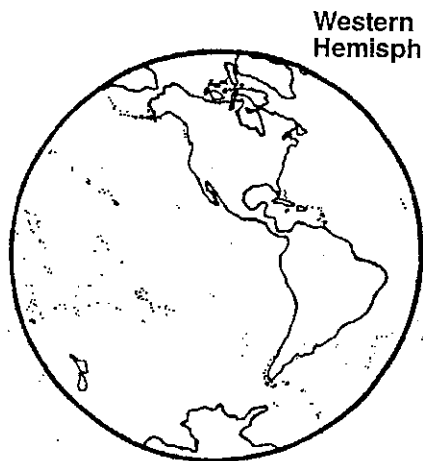
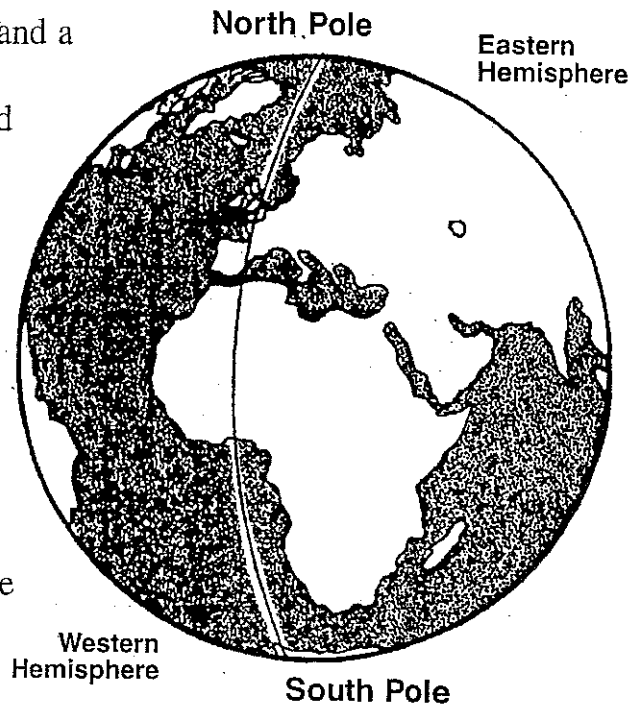
1. Trace the equator with a red marker or pen.
2. Color the Northern Hemisphere green in each picture.
3. Color the Southern Hemisphere blue in each picture.
4. Write the names of the continents by their numbers.

1. _____	2. _____
3. _____	4. _____
5. _____	6. _____
7. _____	

# The Poles and Hemispheres

Just as the Earth is divided into a northern half and a southern half by an imaginary line called the equator, it is also divided into a western half and an eastern half by two imaginary lines that run from the *North Pole* to the *South Pole*.

The line that connects the North Pole and the South Pole on one side of the Earth is called the *prime meridian*. It runs through a place called Greenwich (pronounced Gren'ich), which is in England. The line that connects the North Pole and South Pole on the opposite side of the Earth is called the *International Date Line*. Both lines are part of the same circle that goes around the Earth.



Western Hemisphere



Eastern Hemisphere

The half of the Earth that is west of the prime meridian is called the *Western Hemisphere*. The half of the Earth that is east of the prime meridian is called the *Eastern Hemisphere*.

Name the continents that are in the Western Hemisphere.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Name the continents that are mostly in the Eastern Hemisphere.

4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

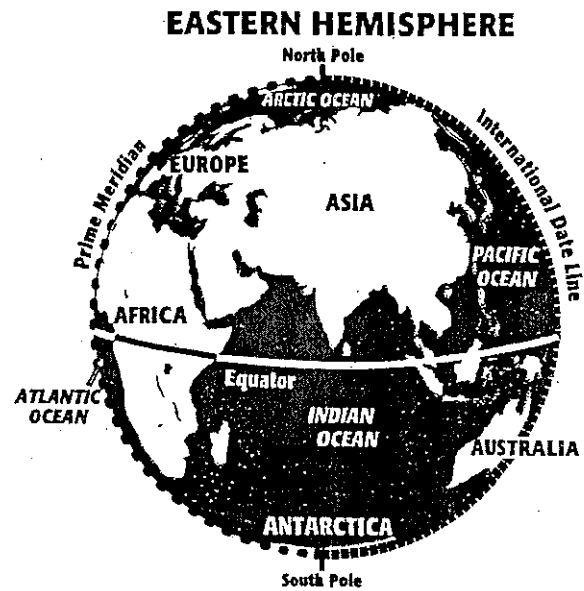
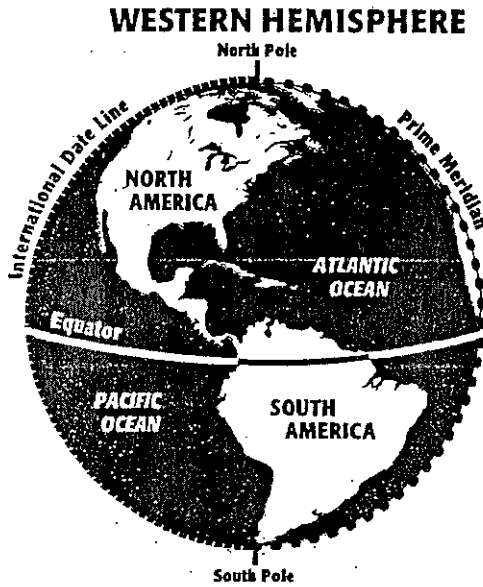
On the back of this paper, write the names of five **countries** in the Western Hemisphere and five **countries** in the Eastern Hemisphere. Use a world map to help you.



# A Look at the Four Hemispheres

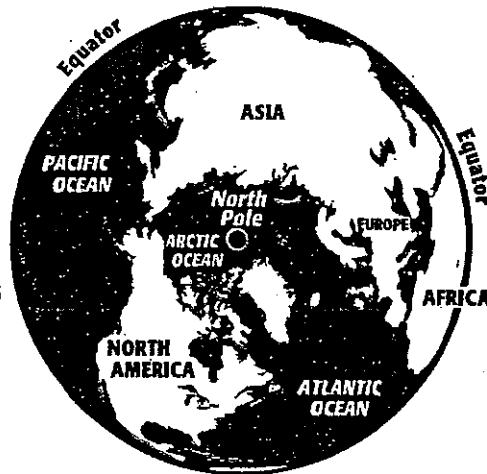
A **globe**, a spherical model of the earth, is a more accurate representation than a map. Half of a sphere is a **hemisphere**. Take a look at these flat depictions of the earth to answer the questions below. Then compare the maps to a globe.

The earth is divided into the Western Hemisphere and the Eastern Hemisphere by two imaginary lines that run north to south, the prime meridian and the international date line.

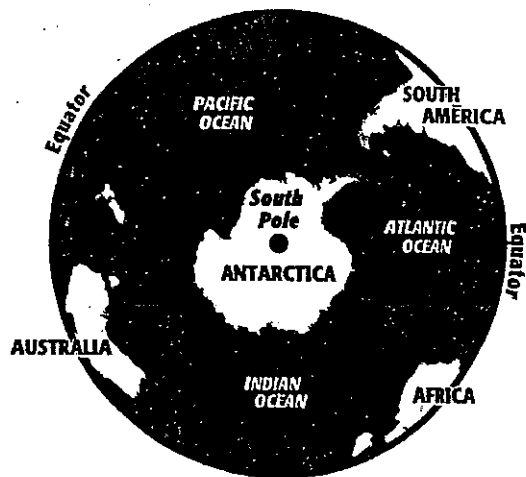


The earth is divided into the Northern Hemisphere and Southern Hemisphere by the equator, an imaginary line that lies halfway between the North Pole and the South Pole.

## NORTHERN HEMISPHERE



## SOUTHERN HEMISPHERE



1. Through which continents does the equator pass? \_\_\_\_\_
2. Which two continents are located completely within the Southern Hemisphere?  
\_\_\_\_\_
3. In which two hemispheres is North America located? \_\_\_\_\_
4. In which two hemispheres is Australia located? \_\_\_\_\_
5. If you traveled from North America to Australia, would you cross the equator? \_\_\_\_\_

# Latitude and Longitude

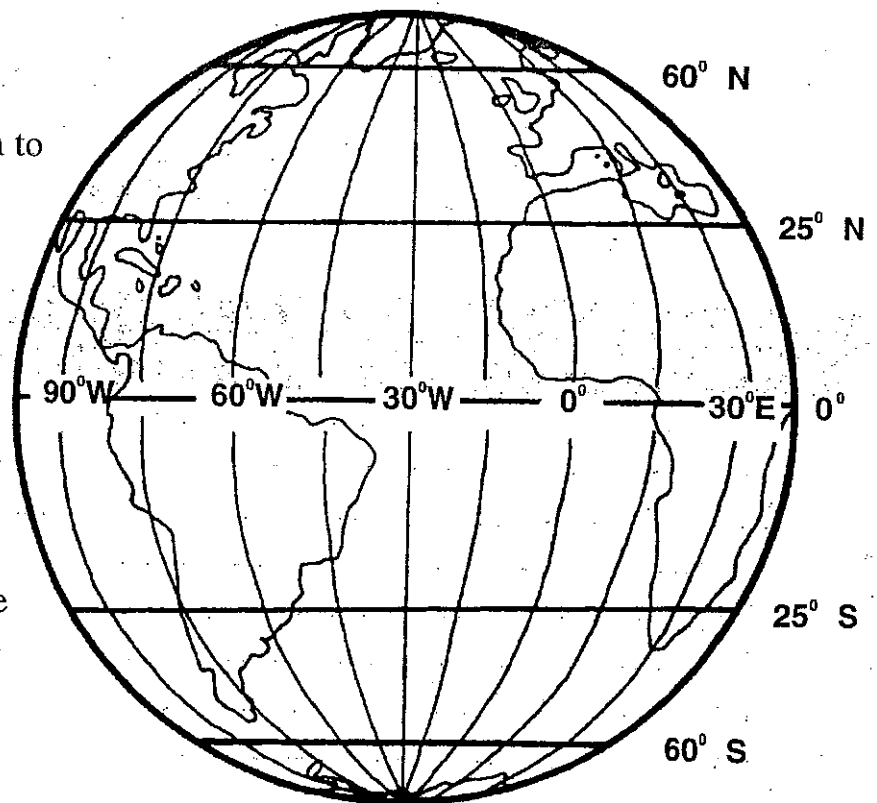
You can find places in the world by knowing how to read *latitude* and *longitude* lines. Latitude and longitude lines (also called *meridian* lines) are imaginary lines that divide the Earth. You have already learned two of these lines — the equator and the prime meridian. The equator is the main line of latitude. The prime meridian is the main line of longitude.

*Latitude* lines run from west to east. They measure distances north and south of the equator.

The equator cuts the world into north and south latitude. The equator is marked 0 degrees. The latitude lines north of the equator are marked N (degrees north) and the latitude lines south of the equator are marked S (degrees south).

*Longitude* lines run from north to south, pole to pole. They measure distances west and east of the prime meridian.

The prime meridian cuts the world into west and east longitudes. The longitude lines west of the prime meridian are marked W (degrees west) and the longitude lines east of the prime meridian are marked E (degrees east).



1. Which lines run from west to east?
2. Which lines run from north to south?
3. The equator is a line of \_\_\_\_\_ (latitude or longitude)
4. The prime meridian is a line of \_\_\_\_\_ (latitude or longitude)

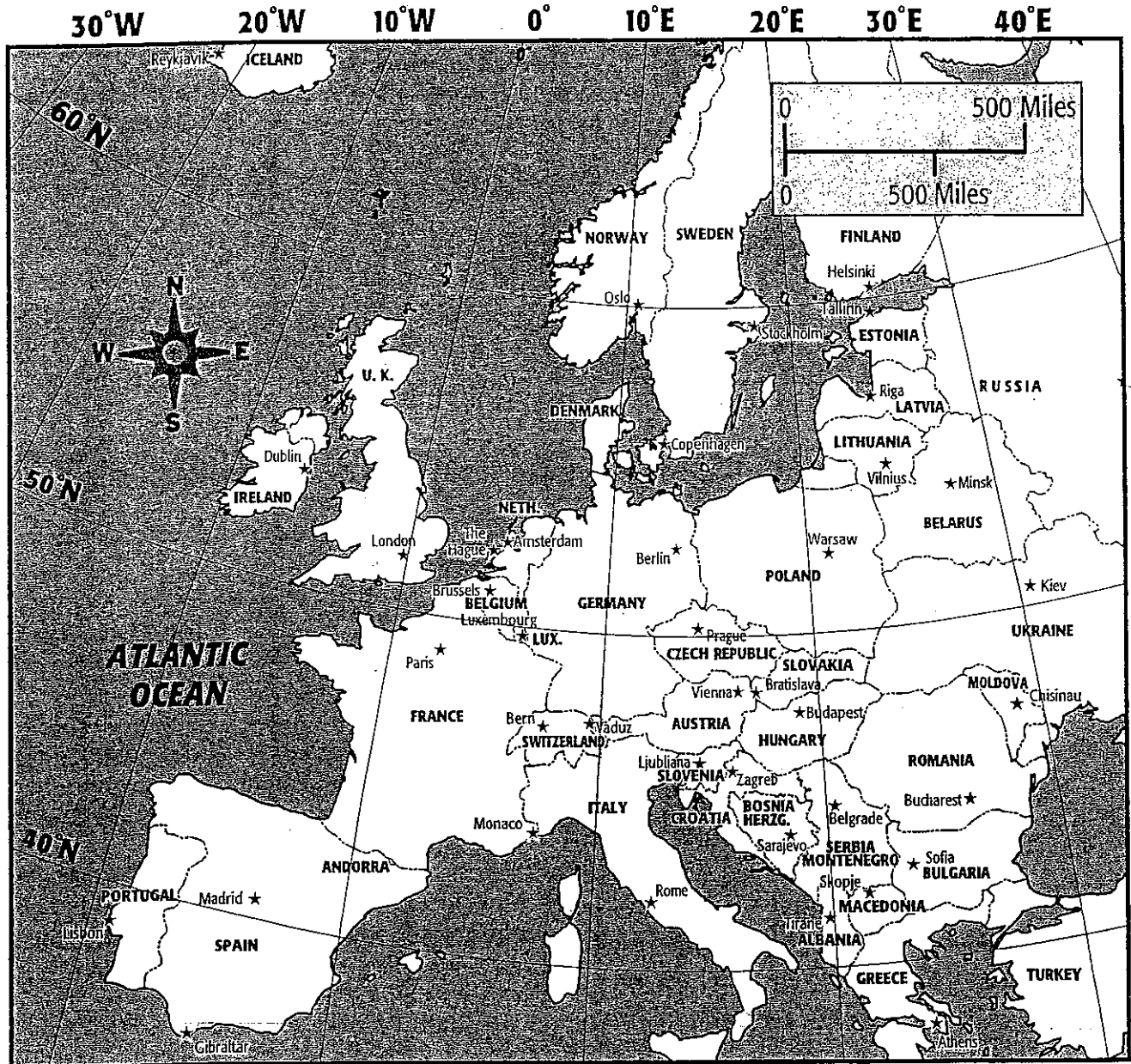
NAME \_\_\_\_\_

DATE \_\_\_\_\_



# A European Adventure

Take a trip through Europe without leaving your seat! The chart below lists the latitude and longitude for six European cities. Use the map to locate and identify each city and country. Then fill in the chart. Remember: **latitude** measures distance north or south of the equator. **Longitude** measures distance east or west of the prime meridian.



CITY	COUNTRY	LATITUDE	LONGITUDE
		51°N	0°W
		52°N	21°E
		53°N	6°W
		41°N	3°W
		48°N	2°E

## LATITUDE

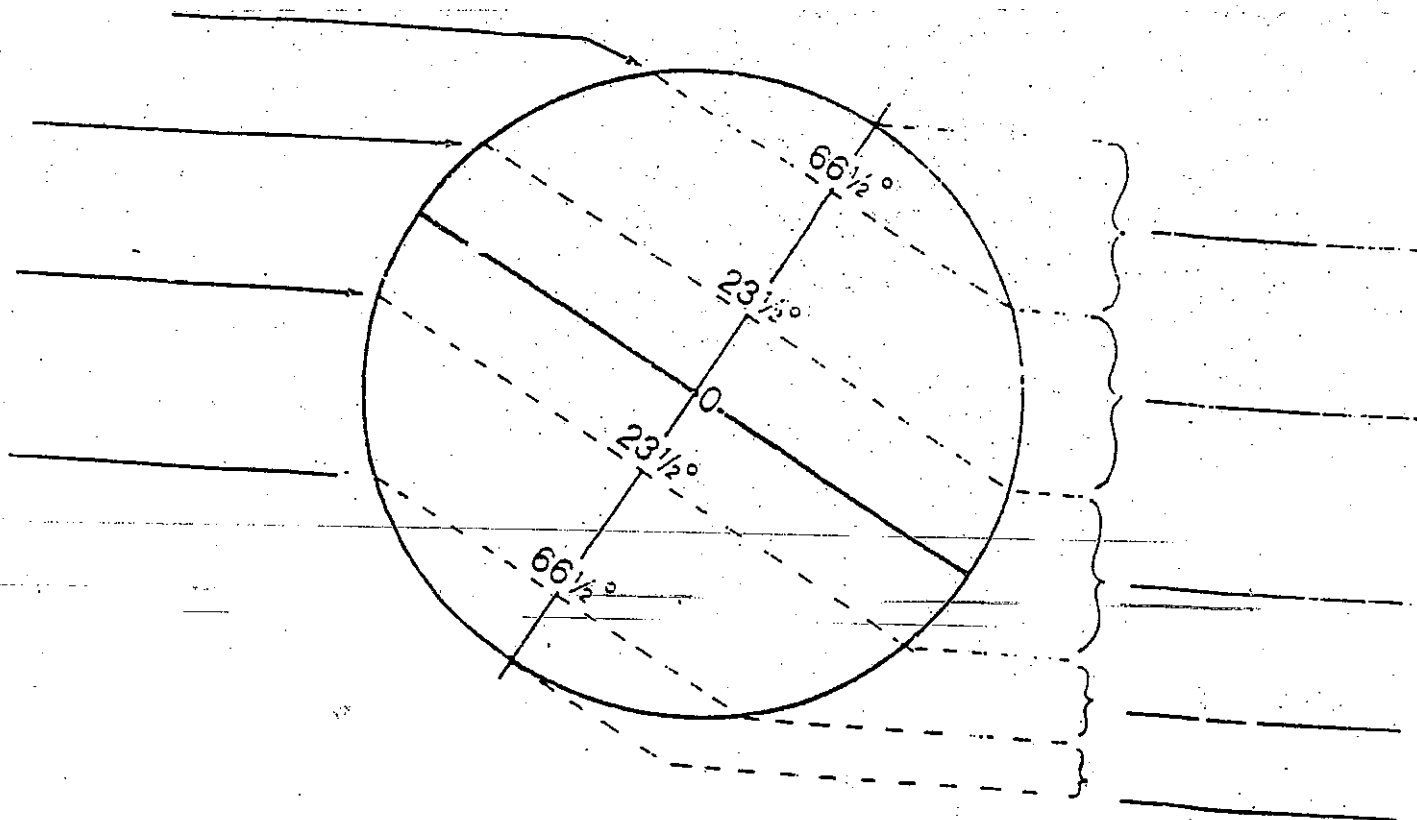
There are four special parallels of latitude which help us understand different climates. Two of these parallels are near the equator. They are the Tropic of Cancer at  $23\frac{1}{2}$  degrees north latitude, and the Tropic of Capricorn at  $23\frac{1}{2}$  degrees south latitude. Between these two parallels is a zone called the low latitudes. The low latitudes have a tropical climate where it is almost always warm and hot there.

The other two parallels are located near the poles. One is the Arctic Circle at  $66\frac{1}{2}$  degrees north latitude. The other is the Antarctic Circle at  $66\frac{1}{2}$  degrees south latitude. Both of these regions are called the high latitudes. These zones have polar climates which are almost always cold all year long.

Areas between the high and low latitudes are called the middle latitudes. The middle latitudes have a more temperate climate with all four seasons.

These temperature zones are very important. They help us know where people can live. Few people live where it is extremely cold or hot. Most people live in the middle latitudes.

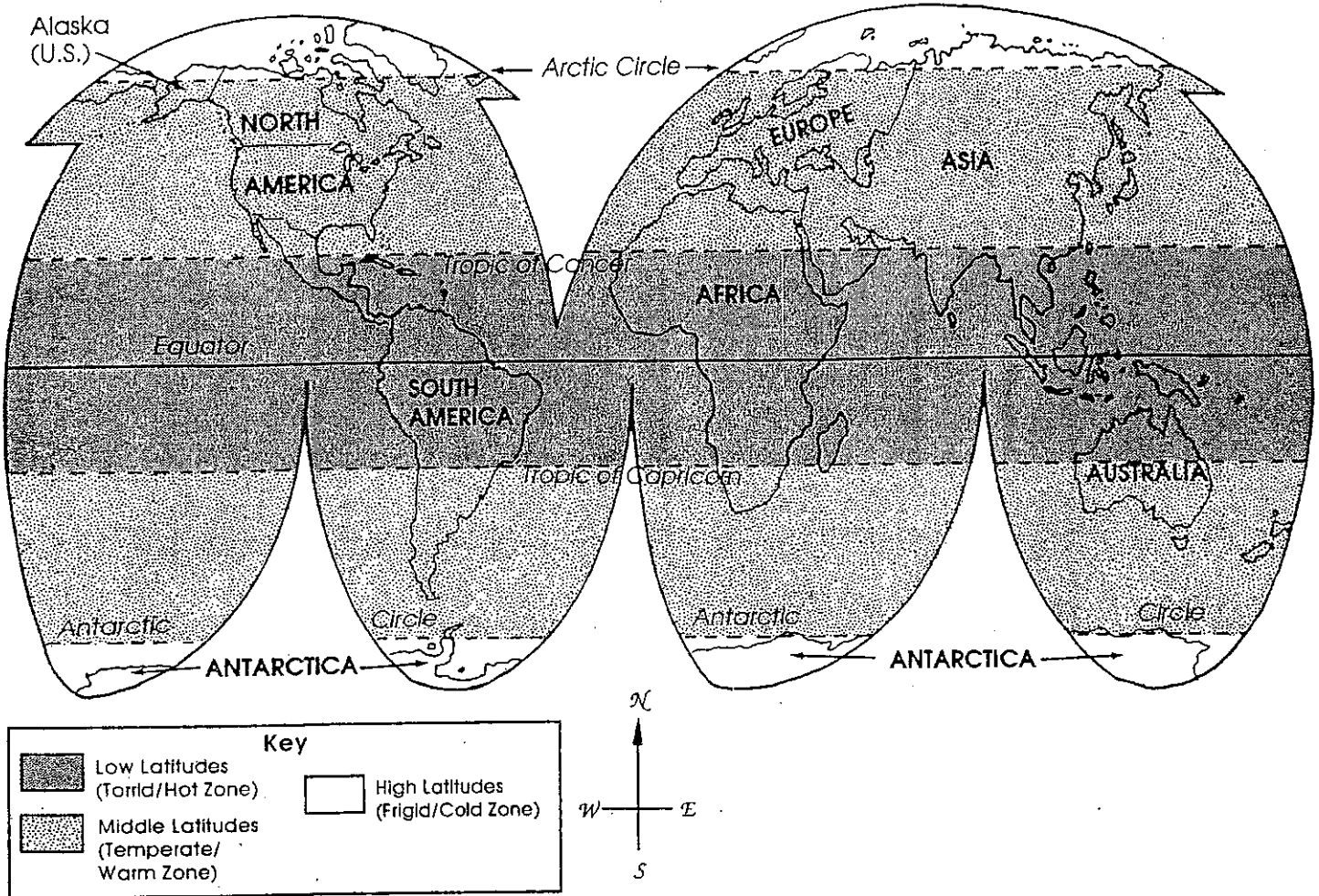
Color the zones on the map below. Use red for the low latitudes, green for the middle latitudes, and blue for the high latitudes. Label the four special parallels and the zones.



# Temperature Zones

Name \_\_\_\_\_

Use this map and map key to answer the questions.



1. The temperate zone is also known as the \_\_\_\_\_ zone.
2. Most of North America is found in the \_\_\_\_\_ latitudes.
3. Australia is divided between which two latitudes? \_\_\_\_\_
4. The Tropic of Capricorn passes through which three continents? \_\_\_\_\_  
\_\_\_\_\_
5. The \_\_\_\_\_ Circle passes through northern Asia.
6. The Tropic of Cancer passes through which three continents? \_\_\_\_\_  
\_\_\_\_\_
7. Most of Europe is located in the \_\_\_\_\_ latitudes.
8. Name the continent located almost entirely in the frigid zone. \_\_\_\_\_
9. What type of climate would you expect to find in northern South America? \_\_\_\_\_
10. Use crayons or markers to color each of the temperature zones a different color.



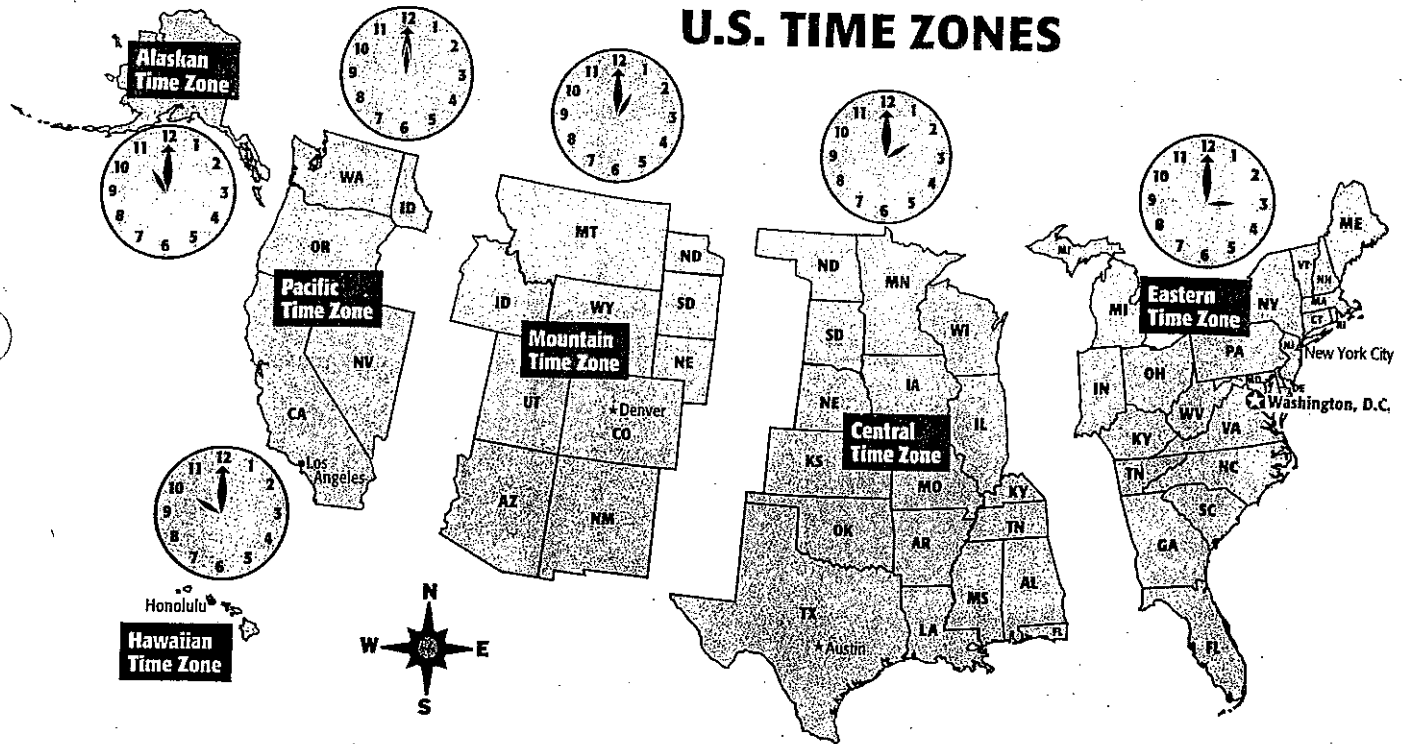
# What Time Is It?



In 1884, at an international conference in Washington, D.C., a system of standard **time zones** for the earth was set up. Railroads in the United States and Canada had already used this system to make train schedules. The system divides the world into 24 time zones, with one zone for each hour of the day. Starting from the prime meridian at Greenwich, England, and extending east and west, the time zones are laid out along lines of longitude 15 degrees apart.

This map of the United States shows six of the U.S. standard time zones. The borders of the time zones do not follow longitude lines exactly.

To read a time-zone map, add or subtract an hour for each time zone crossed. As you move to the east, add one hour for each time zone you cross. As you move west, subtract one hour for each time zone you cross. Use the time-zone map below to answer the questions.



1. What time zone do you live in? \_\_\_\_\_
2. What time zone is to the east of the Mountain Time Zone? \_\_\_\_\_
3. If it is 8 a.m. in Austin, TX, what time is it in Los Angeles, CA? \_\_\_\_\_
4. If the President planned to broadcast a speech from Washington, D.C., at 6 p.m., what time would the broadcast air in Alaska? \_\_\_\_\_ In Denver, CO? \_\_\_\_\_
5. If you boarded a plane in New York City at 5 p.m. for a six-hour flight to Los Angeles, at what time would you arrive? \_\_\_\_\_
6. What time is it in Honolulu, HI, when it is 4 p.m. in Texas? \_\_\_\_\_

