Projection Chart

Type of Projection	Advantage	Disadvantage

CHAPTER 1
The World of Geography

The Geographer's Tools

2

A. As You Read

Directions: As you read Section 2, fill in the table below. Under each main idea, write two supporting statements.

Main Idea A
A long time ago, few people knew anything about the land and water beyond their homes or neighborhoods.
1. _____
2. _____

Main Idea B
Globes are an accurate way of presenting information about the Earth, but flat maps are generally a better way of mapping the Earth.
3. _____
4. _____

B. Reviewing Key Terms

Directions: Complete each sentence by writing the correct term in the blank provided.

5. When a landmass looks larger on a map than it does on the globe, that change in shape is called _____.
6. The symbols that appear on a map are explained in the _____, or legend.
7. A round ball called a(n) _____ shows the Earth in a smaller size, or _____.
8. Geographers call a Mercator _____ a conformal map.
9. A map usually has a compass _____ showing the _____, which are north, south, east, and west.

Name _____

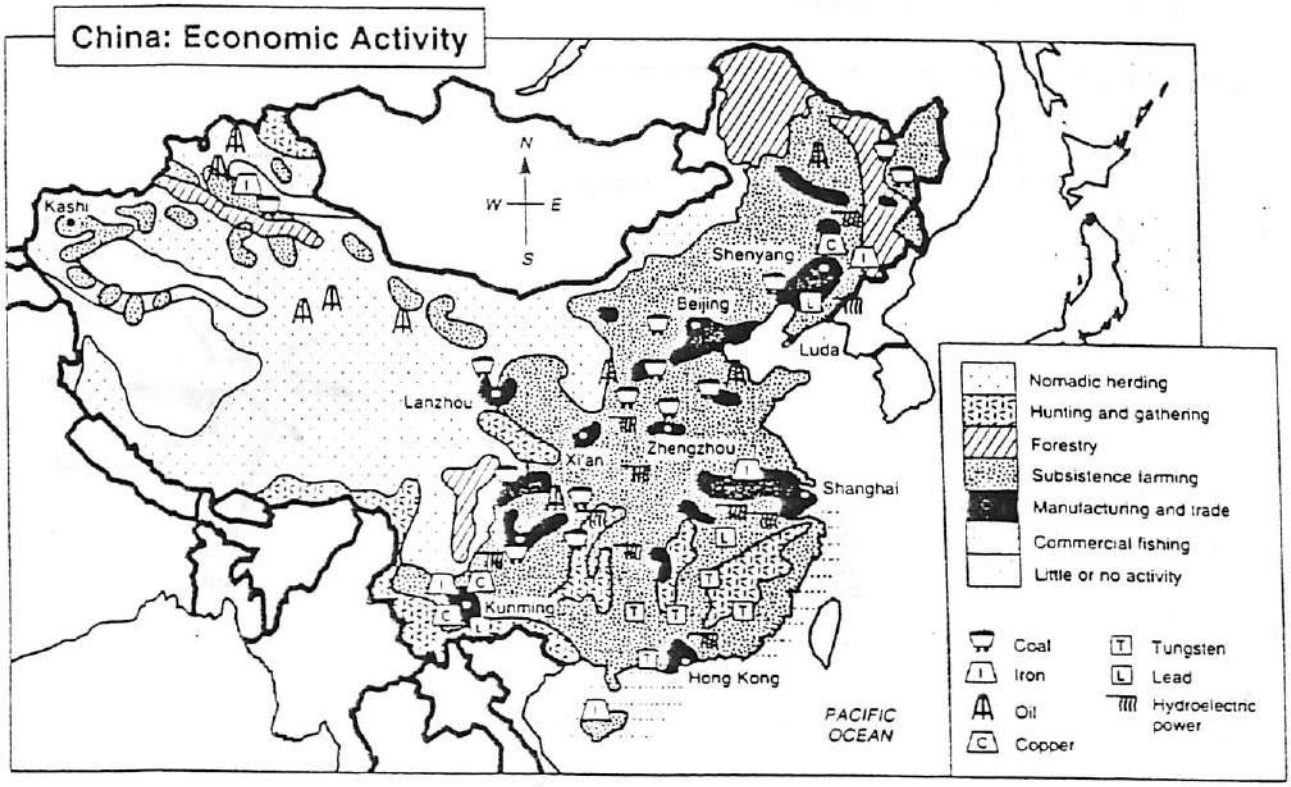
Date Class _____

Map and Globe Skills

Using the Map Key

A map key explains what the symbols, shading, and colors on a map represent. Symbols range from simple dots and circles that represent cities and capitals to tiny drawings that represent types of industry or agriculture. Shading and colors are used to show elevation, population density, political divisions, and so on. The map key for the map of China below uses a combination of shading and drawings to represent economic activity and resources.

Directions: Study the map and the map key. Then, answer the questions that follow.



1. What does the solid black shading represent? _____
2. What kind of shading is used to represent commercial fishing? _____
3. Where does commercial fishing take place, according to the map? _____
4. What symbol is used to represent oil? _____
5. In what part of China is oil found? _____
6. What kind of activity is represented by slanted parallel lines? _____
7. In what part of China are the largest forests found? _____
8. What resource is found in the part of China that surrounds Hong Kong? _____

Name _____

Date Class _____

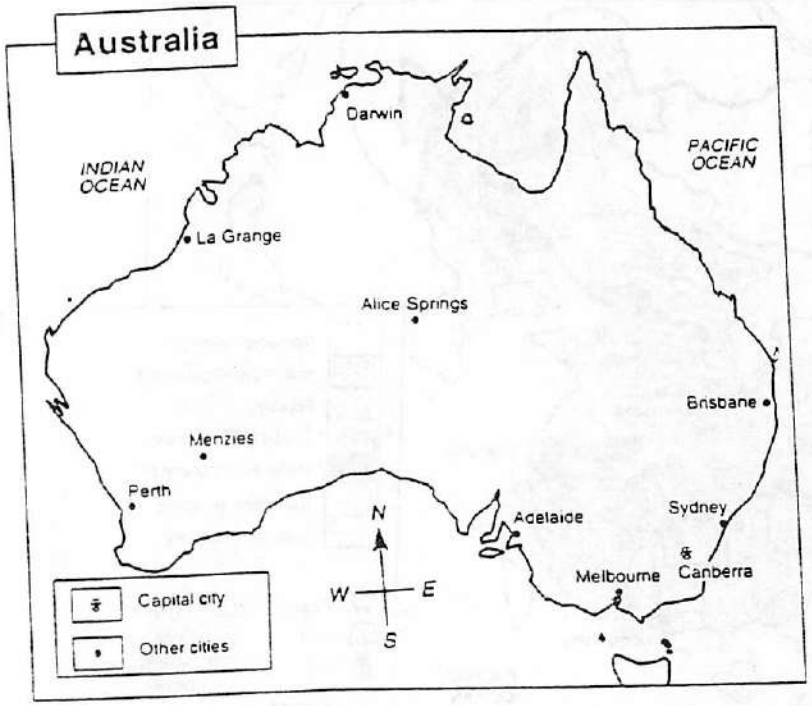
Map and Globe Skills

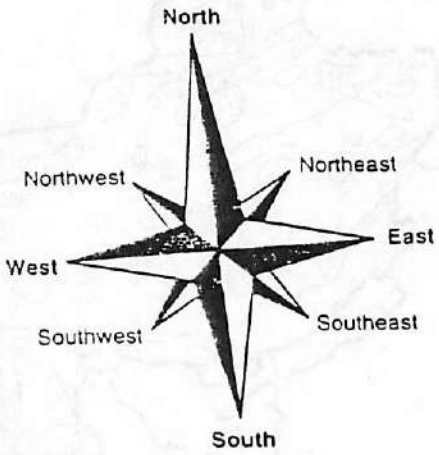
Using the Compass Rose

Most maps include a symbol to tell you which direction on the map is north. On some maps, the symbol is a single arrow pointing toward the letter *N*. The *N* stands for North, and the arrow is pointing toward the North Pole. You can figure out the other directions from that single arrow.

Other maps show the four main directions of the compass—north, east, south, and west. These are called the cardinal directions. However, some maps provide a compass rose that indicates intermediate directions as well as the cardinal directions. Intermediate directions are northeast, southeast, southwest, and northwest.

Directions: Study the compass rose and the map of Australia beside it. Then, answer the questions that follow.





1. What is the direction from Alice Springs to Darwin? _____
2. What direction would you be taking if you traveled from Sydney to Alice Springs?

   _____
3. In what direction would you go to get from Perth to Menzies? _____
4. Darwin is on the northern coast of Australia. On what coast is Melbourne located?

   _____
5. On what coast is Brisbane located? _____
6. If you flew across Australia from La Grange to Sydney, in what direction would you be traveling? _____

Name _____

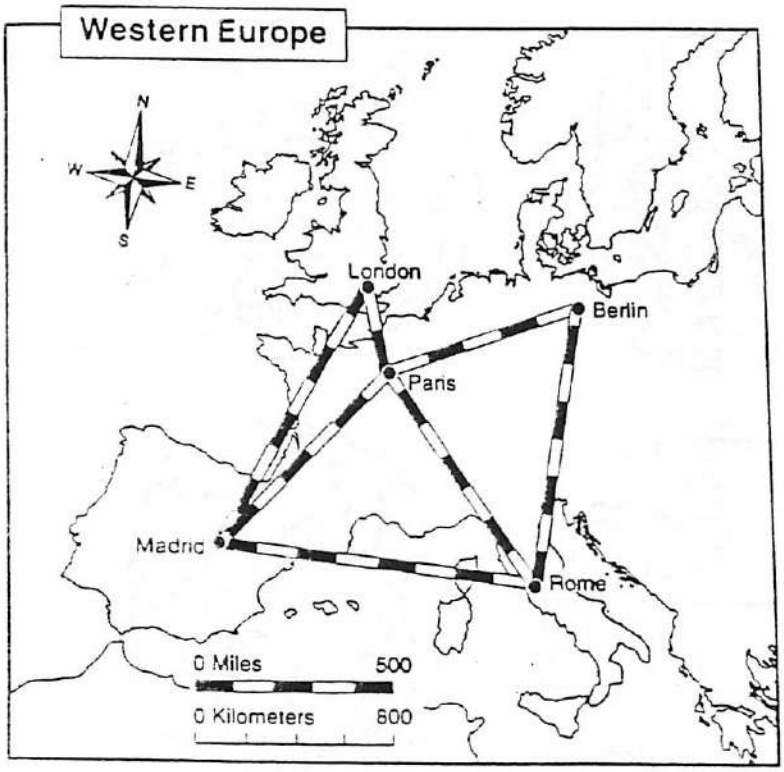
Date Class _____

Map and Globe Skills

Using the Map Scale

A map is always much smaller than the area it represents. In order to figure out distances when using a map, you need to know the scale of the map. The scale on a map tells you the relationship between a distance on a map and the real distance on the earth's surface. You measure a distance on the map. Then, you use the scale to convert it to the real distance.

Directions: Study the map and the map scale below. Then, use a ruler along with either a piece of string or the edge of a piece of paper to measure distances and to answer the questions.



1. How many miles is it from London to Madrid? _____

   How many kilometers? _____
2. If you were to fly directly from Rome to Paris and then on to Berlin, how many miles would you travel? _____
3. Which city is farther from Paris, Madrid or Berlin? _____
4. If you were to travel from London to Rome via Paris and back again by the same route, how many miles would you travel? _____
5. How many kilometers would you go if you flew from Madrid to Rome? _____

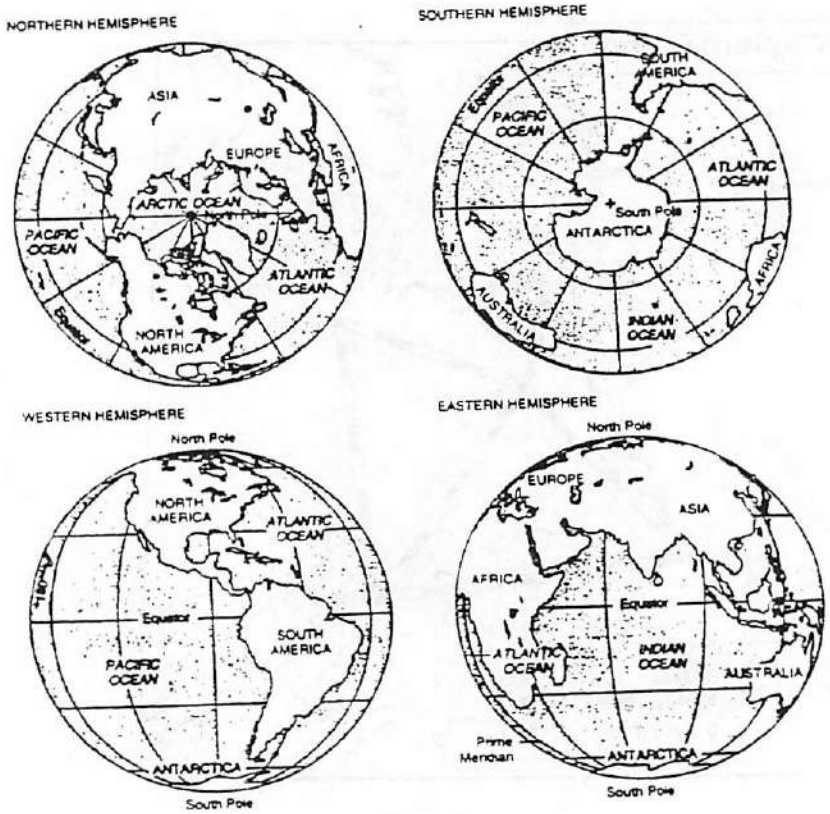
Name _____

Date Class _____

Understanding Hemispheres

The word *hemisphere* means half of a sphere. The earth can be divided into hemispheres in two different ways. When it is divided along the Equator, the two hemispheres are the Northern Hemisphere and the Southern Hemisphere. When it is divided along the Prime Meridian from the North Pole to the South Pole, the two hemispheres are the Western Hemisphere and the Eastern Hemisphere.

Directions: Study the illustrations of the earth's hemispheres below. Then, answer the questions that follow.



1. In which two hemispheres is the United States located? _____
2. What is the line that divides the Northern Hemisphere from the Southern Hemisphere?

_____

3. In which two hemispheres is Australia located? _____
4. Which ocean is not found in the Western Hemisphere? _____
5. Which hemisphere is the only one in which Antarctica is not found? _____

_____

Name _____

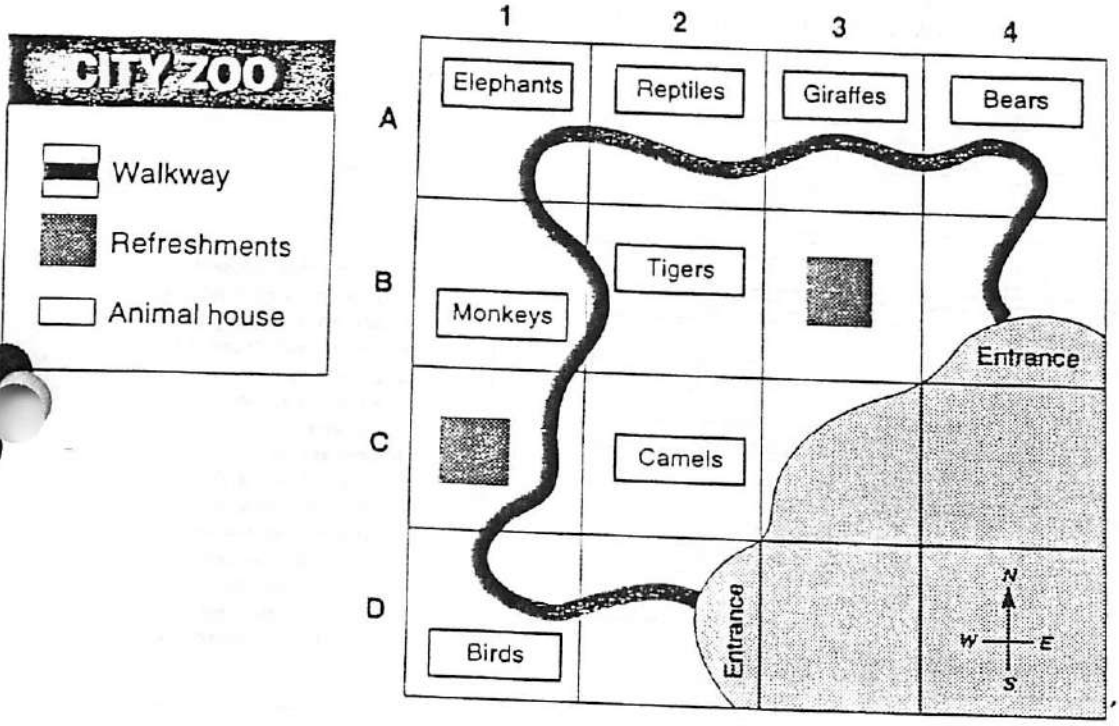
Date _____ Class _____

ap and Globe Skills

Understanding Grids

Maps often have grids drawn on them to help you find the exact location of a place. A grid is a system of horizontal and vertical lines that cross each other to form squares. The squares are labeled with numbers from left to right and with letters from top to bottom. That way, each square has its own number/letter combination. A grid map of a city zoo appears below.

Directions: Study the map and the grid below. Then, answer the questions that follow.



1. In what square are the bears located? _____
2. What animals are located in A3? _____
3. In what two squares are the zoo entrances? _____
4. If you were to follow the walkway from the west entrance to the elephant house, what squares would you pass through? _____
5. What squares would you pass through if you came in at the north entrance and followed the walkway to the elephant house? _____

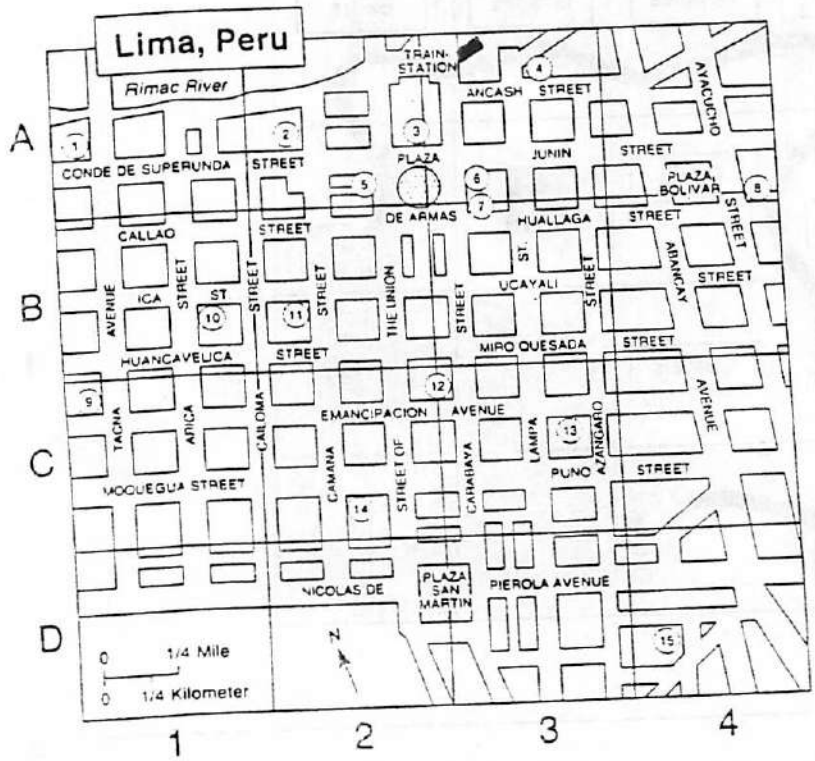
Name _____

Date _____ Class _____

Using a Map Grid

Map grids are very useful for locating places on a street map or a road map. Imagine that you arrive in a city you've never visited before and that you need to locate a particular street. You don't want to read all of the street names on the map to find the one you need. Instead, you use the map index. The map index will give the number and the letter of the square in which the street you want is located. Once you find the correct square, you will find the street in that square.

Directions: Study the street map of Lima, Peru, and the index to some of its main buildings. Then, answer the questions that follow.



Index

1 Church of Santa Rosa, A1
2 Church of Santo Domingo, A2
3 Government Palace, A3
4 San Francisco Church, A3
5 City Hall, A2
6 Archbishop's Palace, A3
7 Cathedral, B3
8 Congress, A4
9 Church of Las Nazarenas, C1
10 Municipal Theater, B1
11 Church of San Augustin, B2
12 Church of La Merced, C3
13 Trinity Church, C3
14 Church of Jesus Maria, C2
15 San Marcos University, D4

1. At the intersection of which two streets is the Church of Santa Rosa? _____
2. What is the grid location of San Marcos University? _____
3. If you were walking from the Church of La Merced to Trinity Church, what avenue would you walk along? _____
4. What street would you take to get from the Church of San Augustin to the Church of Jesus Maria? _____
5. If you were telling someone the location of the building where Congress meets, what two streets would you name? _____

Name _____

Date Class _____

Understanding Latitude and Longitude

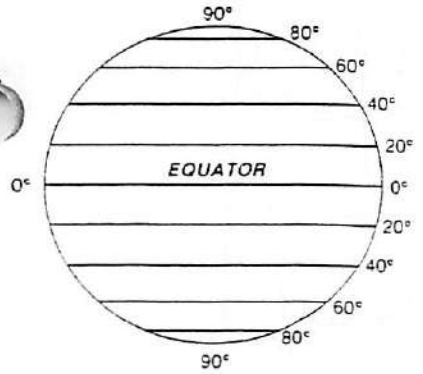
Lines of latitude and longitude work somewhat like a map grid, but on a global scale. These two sets of imaginary lines circle the globe. Lines of latitude run east and west; lines of longitude run north and south. Together, they form a grid. Locations on these lines are stated in degrees. Each degree is divided into 60 minutes.

Lines of latitude are also called parallels because they are parallel to each other. The Equator is located at 0° latitude. All the other lines of latitude are said to be so many degrees north or south of the Equator.

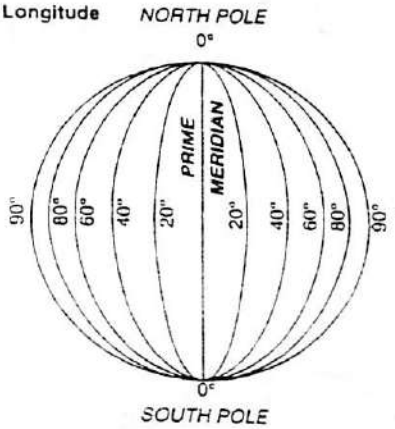
Lines of longitude are also called meridians. All lines of longitude pass through the North Pole and the South Pole. The line for 0° longitude passes through Greenwich, England. It is called the Prime Meridian. All other lines of longitude are measured in degrees east or west of the Prime Meridian. East and west meridians meet at 180° in the Pacific Ocean.

Directions: Study the illustrations of latitude and longitude below. Then, answer the questions that follow.

Lines of Latitude



Lines of Longitude



1. What are two names for the lines that run north to south?

_____

_____

2. What are two names for the lines that run east to west?

_____

_____

3. What would be the line of latitude for a place that is halfway between the Equator and the North Pole?

_____

What would be the line of longitude for a place that is west of the Prime Meridian, halfway between the Prime Meridian and the 180° line of longitude?

_____

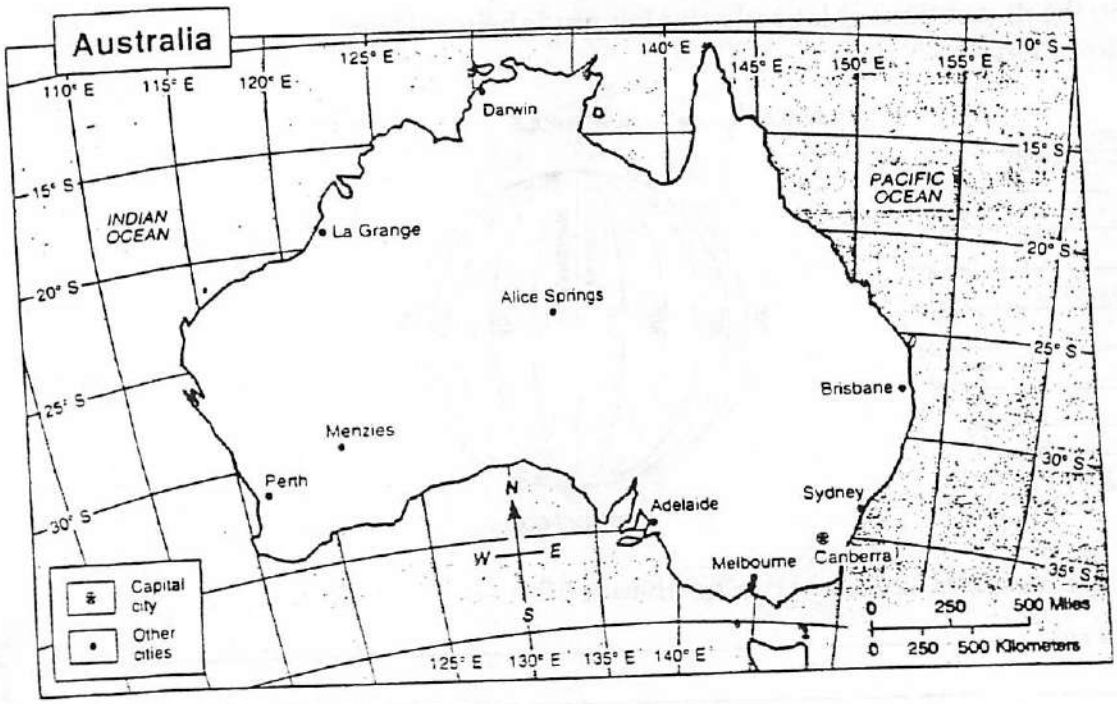
Name _____

Date Class _____

Using Latitude and Longitude

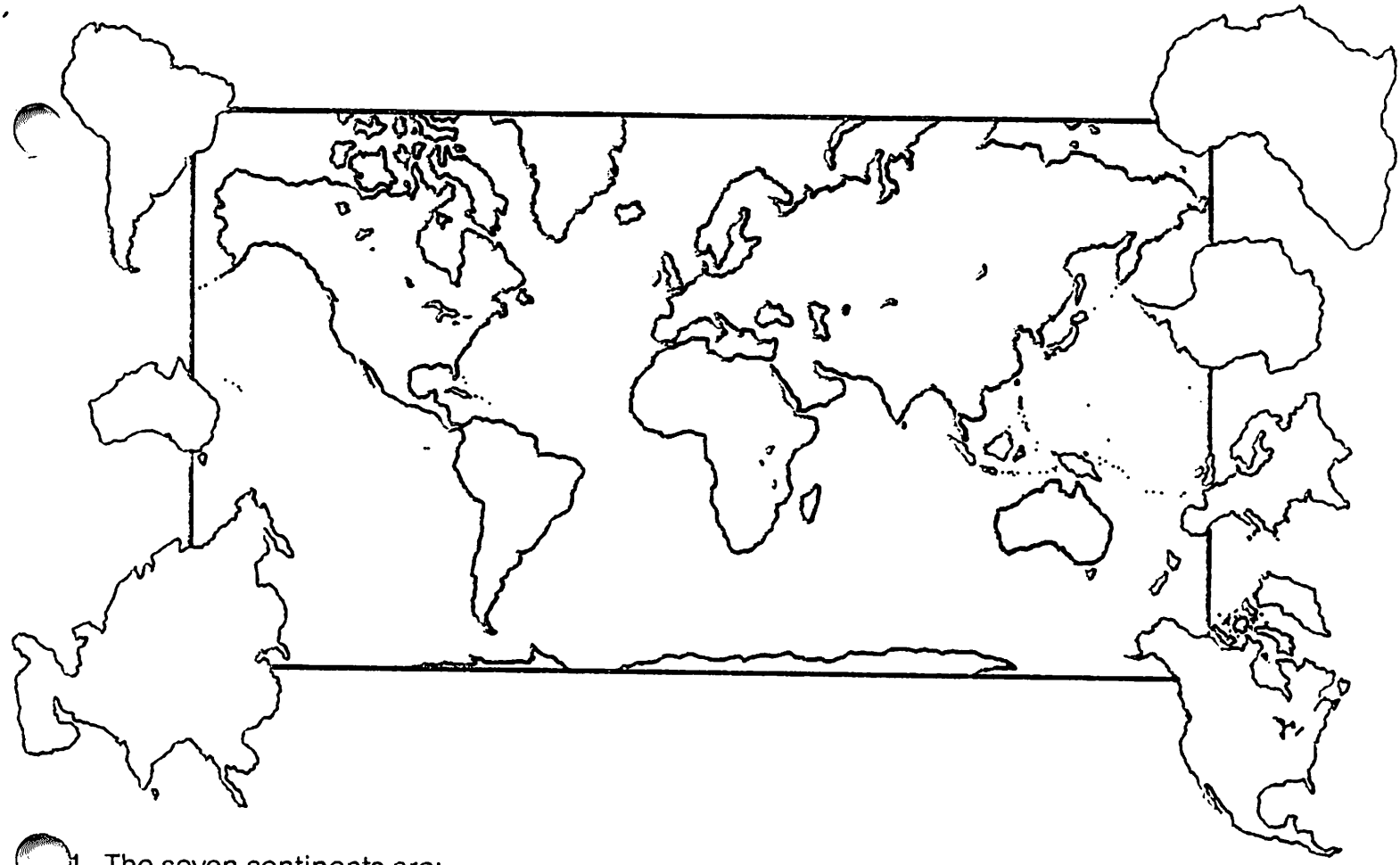
Every place on earth has two points, or coordinates, that mark its location. These coordinates are measured in degrees of latitude and degrees of longitude. Imagine that you want to find out where Beijing, China, is. You start with the index section of an atlas. This index gives you not only the page number of the map of China, but also the coordinates for Beijing: 40°N, 116°E. So you know that when you turn to the map of China, you will look for the line of latitude marked 40°N. Then, you will look in the area between 110°E and 120°E and you will find Beijing.

Directions: The map of Australia below shows lines of latitude and lines of longitude, each labeled in degrees. Give the approximate locations of the cities listed below the map.



	Latitude	Longitude
1. Canberra	_____	_____
2. Melbourne	_____	_____
3. Darwin	_____	_____
4. Perth	_____	_____
5. Brisbane	_____	_____

Name _____ Oceans and Continents



1. The seven continents are:

1. _____ 5. _____

2. _____ 6. _____

3. _____ 7. _____

4. _____

Label each continent outline with the number of your answer.

2. The four oceans are:

1. _____ 3. _____

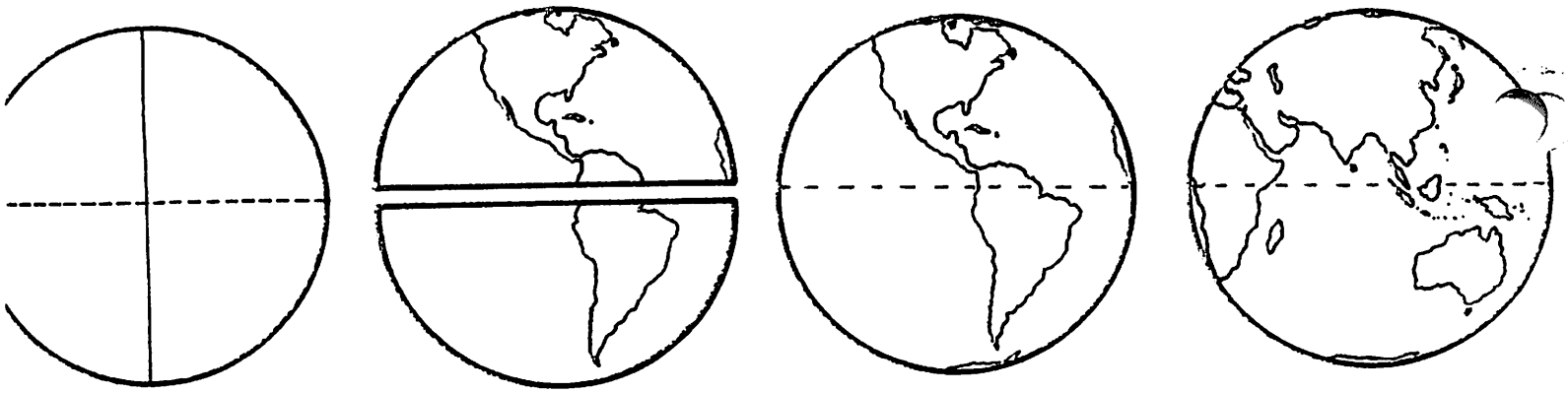
2. _____ 4. _____

Label the oceans on the map.

3. The smallest continent on earth is _____ .

4. The largest continent on earth is _____ .

5. On what continent do you live? _____



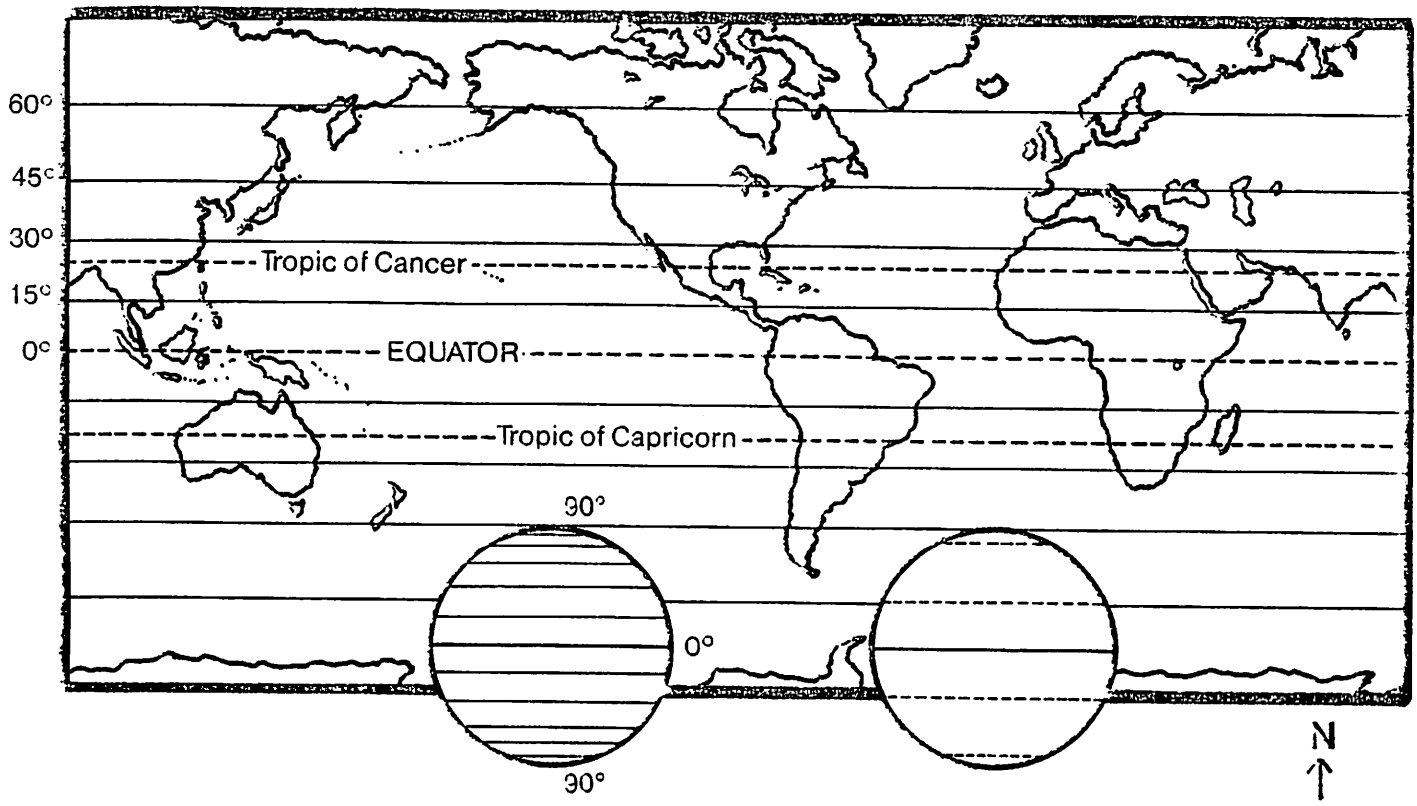
Label the information shown on the globes.

1. World globes are divided into Northern and Southern Hemispheres by the _____.
2. The point farthest north on the globe is the _____.
3. The _____ also divides the earth into Hemispheres.
4. The direction toward the South Pole from the Equator is _____.
5. The Arctic Ocean is not found in the _____ Hemisphere.
6. The Western Hemisphere includes _____, _____, and part of _____.
7. The largest continent is located in the _____.
8. The _____ Ocean is not found in the Western Hemisphere.
9. The Northern Hemisphere is located between the _____ and the _____.
10. The Arctic Ocean is closest to the _____.

Which Way?

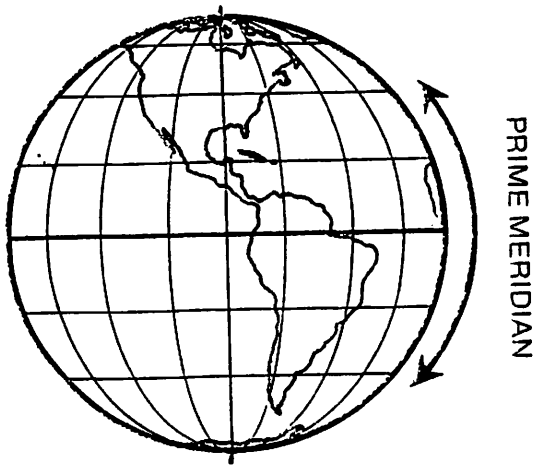
1. The Equator runs _____ and _____.
2. The Prime Meridian runs _____ and _____.
3. As you face the South Pole the direction on your right is _____.
4. To get from your city to the Equator you would travel _____.
5. You live _____ of the Prime Meridian.
6. As you face east, the North Pole is on your _____.
7. All of Australia is _____ of the Equator.

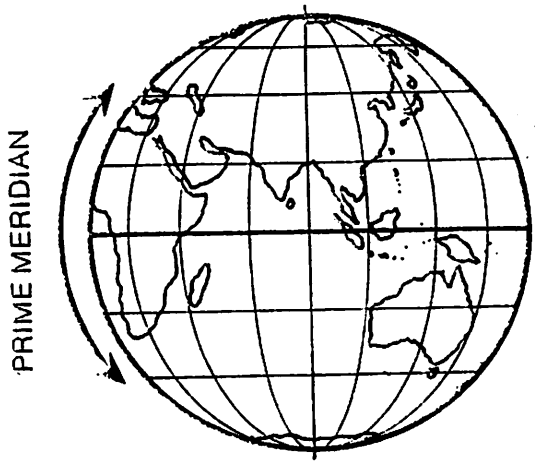
Name _____ Latitude



1. Lines of latitude run _____ and _____ around the globe.
2. They measure distance _____ and _____ of the Equator.
3. They are sometimes called parallels because they never _____.
4. The Arctic Circle is _____ of the Tropic of Cancer.
5. There are _____ degrees from the Equator to the South Pole.
6. The Tropic of Capricorn is in the _____ Hemisphere.
7. The _____
   is found at 23½°North latitude.
8. With each line of latitude you cross, moving from the North Pole, you get nearer the
   _____.
9. If you travel 60°South, you are moving toward the _____ Pole.
10. There are _____° between the North and South Poles.

Name _____ Longitude





1. Lines of longitude meet at the _____. 2. The _____ is 0° longitude.
3. South America is _____ of the Prime Meridian.
4. _____ and _____ are both east and west of the Prime Meridian.
5. The Prime Meridian and the _____ meet at 0° longitude and 0° latitude.
6. The Prime Meridian meets at _____ place on the globe.
7. A continent in the Northern, Southern, and Western hemispheres is _____.
8. The Prime Meridian runs _____ and _____ through Greenwich, England.
9. Lines of longitude run north and south and measure distances _____ and _____.

Where Am I? Use a classroom map or globe.

1. My hometown is _____°N and _____°W.
2. I am a city at 32°N and 138°E. _____.
3. If I traveled east what city in the U.S. at approximately 37°N and 123°W would I come to?

   _____.
4. Locate the capital of the United States by degrees of latitude and longitude.

   _____.
5. What city, country is at 60°N and 18° E? _____.
6. What capital city in South America is at the same degrees south as Sydney, Australia?

   _____.
7. Locate these places:
   A. 45°N - 75°W. _____
   B. 30°N - 90°W. _____
   C. 0° - 105°E. _____
8. New York City is on the same degree of latitude as what two European capitals?

   _____.