

Geography Boot camp

Welcome to the Geography Boot Camp. This Boot camp is designed to get you up to speed quickly on the skills you should have developed in elementary school. If you have already learned these skills then this should act as a review. If you have not learned these skills then you need to work hard to learn the skills now.

You should keep the Geography Boot Camp as a review to look at throughout this seven year Social Studies curriculum

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Understanding Maps

Map Keys/Legends

A. Explain what the symbols mean on a map

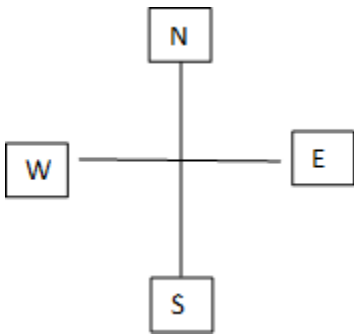
Symbols

A. Map Makers known as cartographers use symbols to show information on a map Symbols can be lines such as boundaries, colors, or, pictures

Directions on a Map

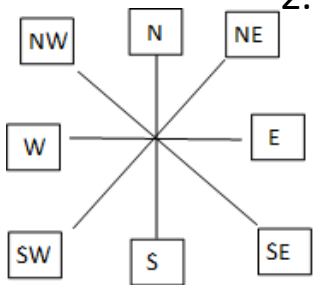
A. Compass Rose- shows directions on a map. It shows both Cardinal directions and Intermediate directions

1. **Cardinal Directions** North, South, East, and West.



- North is the direction of the North Pole and South is directly opposite of North. West is to the left of North and East is to North's right
- The Letters N,S,E,W are used to stand for the cardinal directions

2. **Intermediate Directions**- directions halfway between the cardinal directions: Northwest (NW) Northeast (NE) Southwest (SW), and Southeast(SE)



Scale- maps are smaller than what they represent In order to figure out distances when using a map you need to know the scale of the map. The scale tell you the relationship between distance on a map and the real distance on the surface of earth. When you measure distance on a map, you can then figure out the real distance

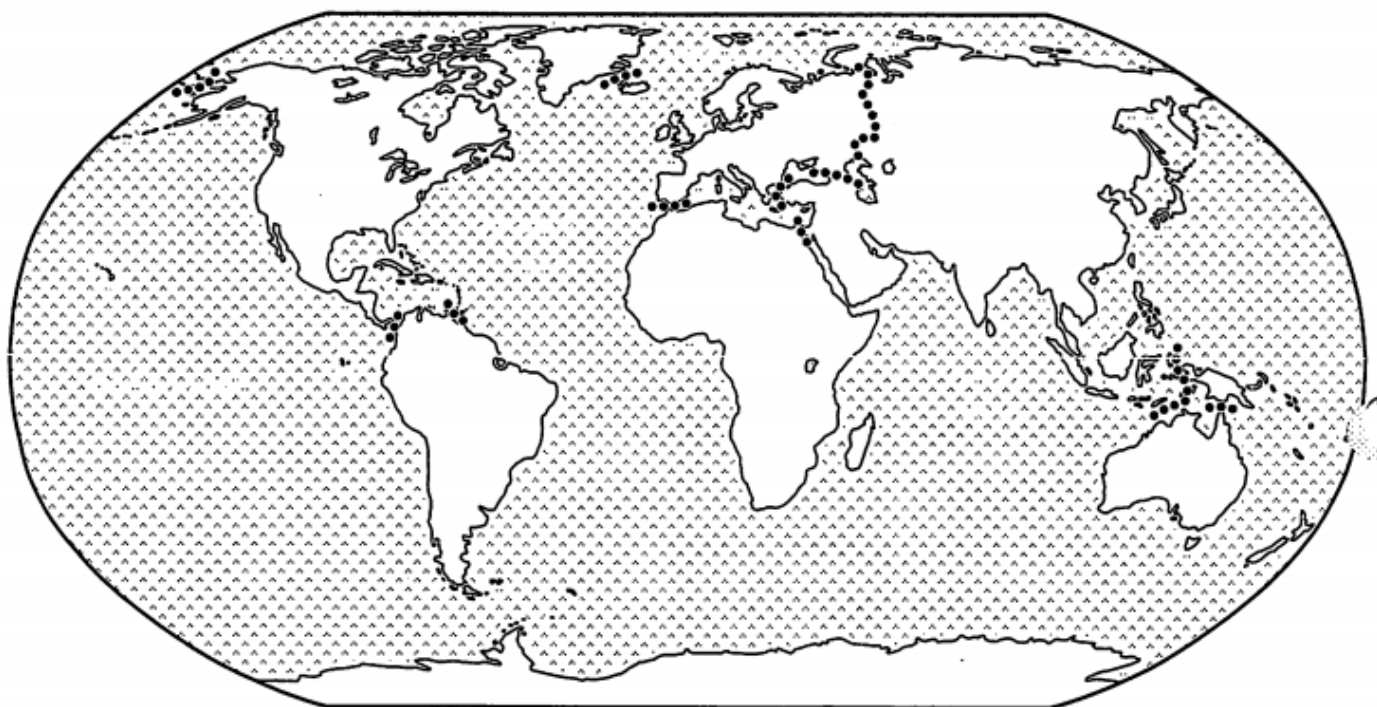
For example 1 inch on a map can equal 1 mile on the earth or it could measure 1,000 miles on earth depending on how big the scale is.

Getting to know the World Map

The world can be divided into 7 continents and 4 oceans. Use the world map to name the continents and oceans below

1. What two continents are completely south of the Equator _____
2. What two continents are completely north of the Equator _____
3. What three continents are crossed by the equator _____
4. What three continents cross the Prime Meridian _____
5. What is the ocean between South America and Africa _____
6. What is the ocean surrounding the North Pole _____
7. What is the ocean between Asia and North America _____
8. What is the Ocean between Europe and North America _____
9. What is the ocean between Australia and Africa _____
10. What 4 continents have coastlines on the Indian Ocean

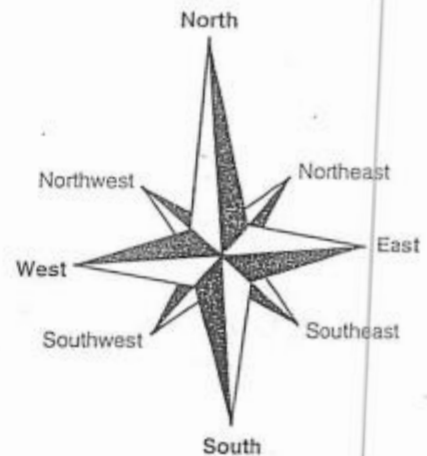
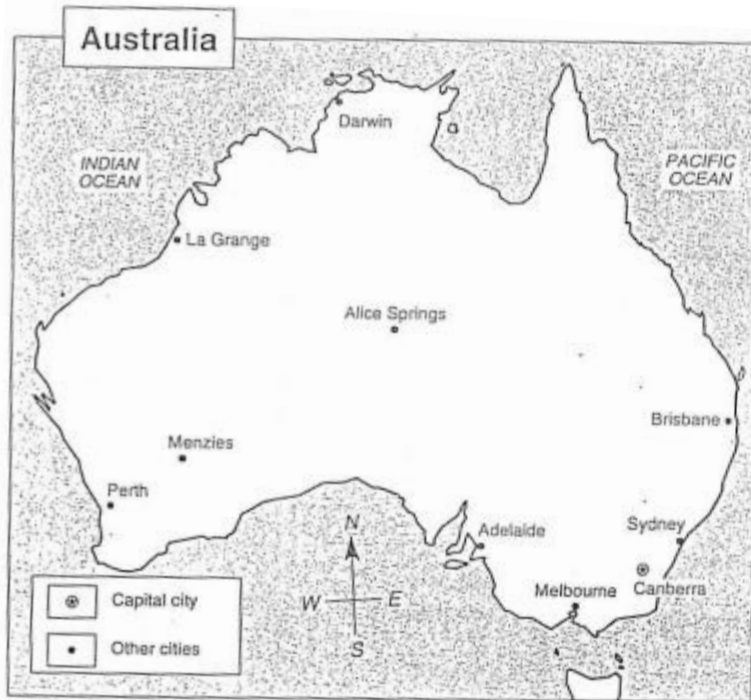
11. Is there more land north or South of the Equator _____
12. Label the 7 continents and 4 oceans on world map



Using a Compass Rose

Most maps will include a compass rose to help you figure out the cardinal and intermediate directions on the map.

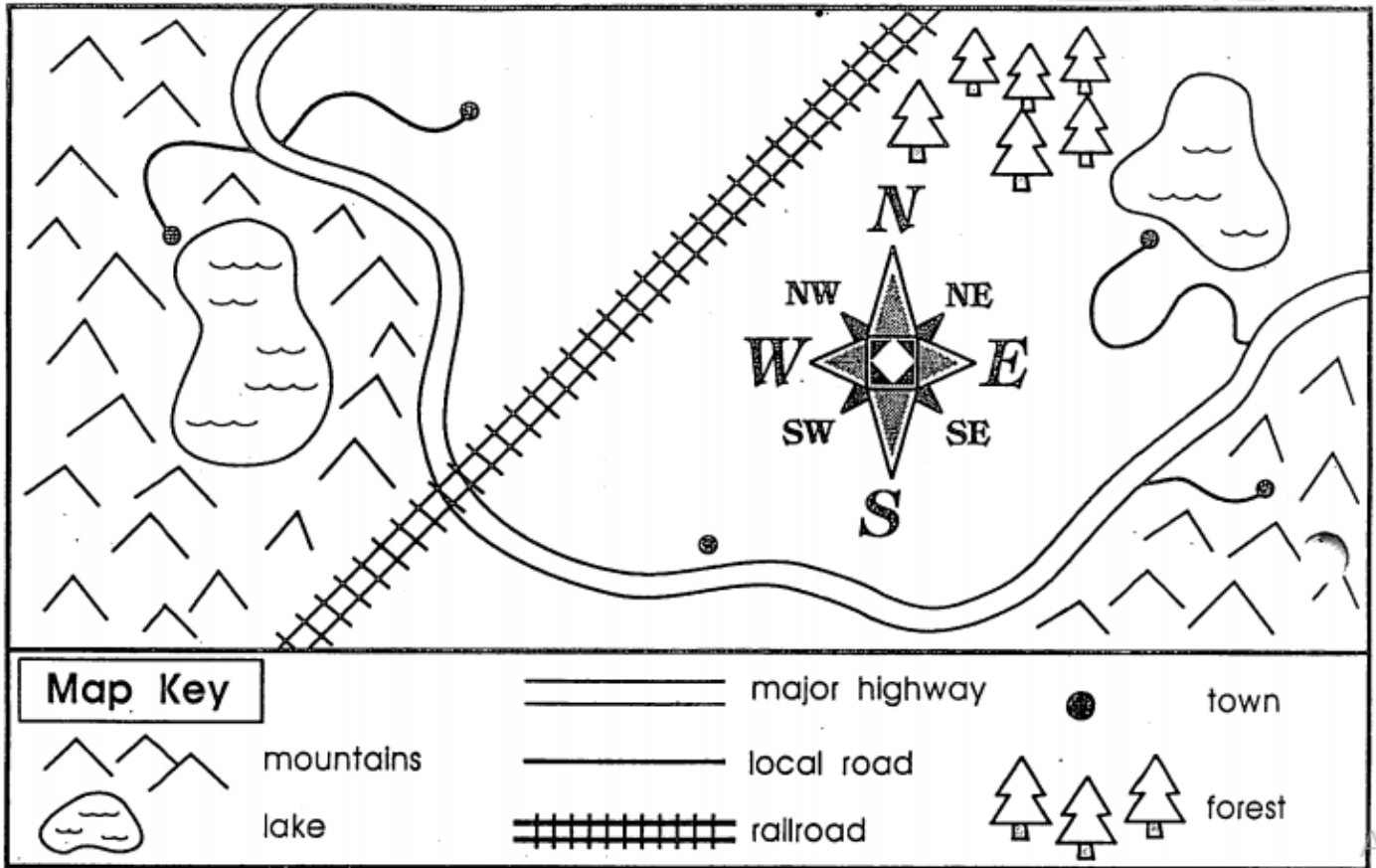
Directions study the map below and use the map and compass rose to answer the following questions



1. What is the direction from Alice Springs to Darwin? _____
2. What direction would you be traveling if you went from Canberra to Alice Springs?
3. What is the direction from Darwin to La Grange? _____
4. If Melbourne is on the Southern Coast, what coast is Darwin _____
5. What coast is Brisbane located?
6. If you flew across Australia from Sydney to La Grange what direction would you be headed?

I've, Got the Key

Look at this map and the map key. Use it to answer the questions below.



Answer true or false

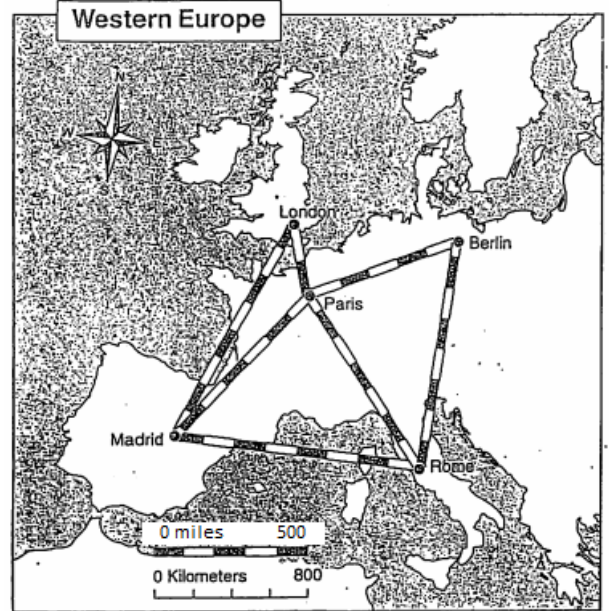
1. A rail road track runs southwest to northeast _____
2. There are more mountains in the East _____
3. Mountains cover the northern section on the map _____
4. A lake and a forest are in the southeast _____
5. All towns can be reached by a major highway _____
6. Two towns are by lakes and two are in the mountains _____
7. There are no towns along the railroad track _____
8. There is a large forest east of the lake and west of the railroad track _____
9. The southernmost town is next to the major highway _____
10. There are no lakes west of railroad _____

Using the Map Scale

Directions: Study the map and map scale on right to figure out the real distances

1. How many miles is it from Berlin to Rome?

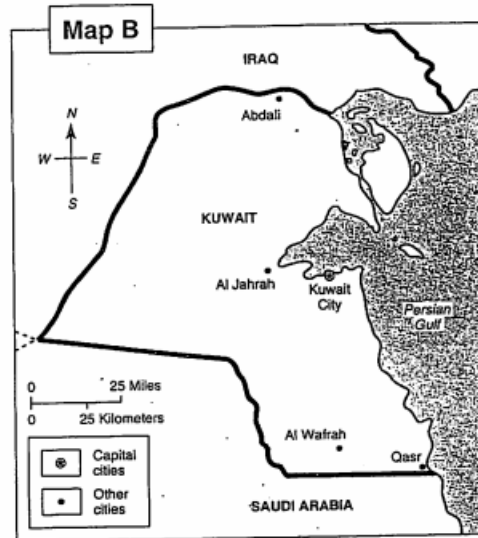
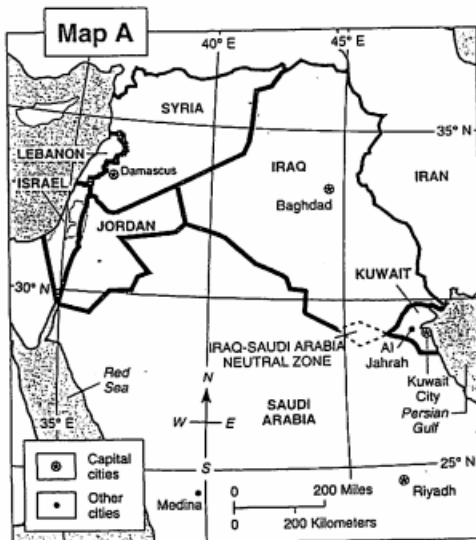
2. If you were to fly from Rome to Paris and then to London, how many miles would that be? _____
3. Which city is farther from Paris; Madrid or Berlin
4. If you were to travel from Madrid to Berlin through Paris and then come back the same way, how many miles would you travel. _____
5. How far is it from London to Paris? _____



Comparing Maps of Different Scale

Different maps have different scales. A small scale map shows a large area. A large scale map shows a smaller area in greater detail. Below are two maps. Map A is a large scale map showing part of the Middle East. Map B is a larger scale map of Kuwait

Directions: Study the maps and answer the questions

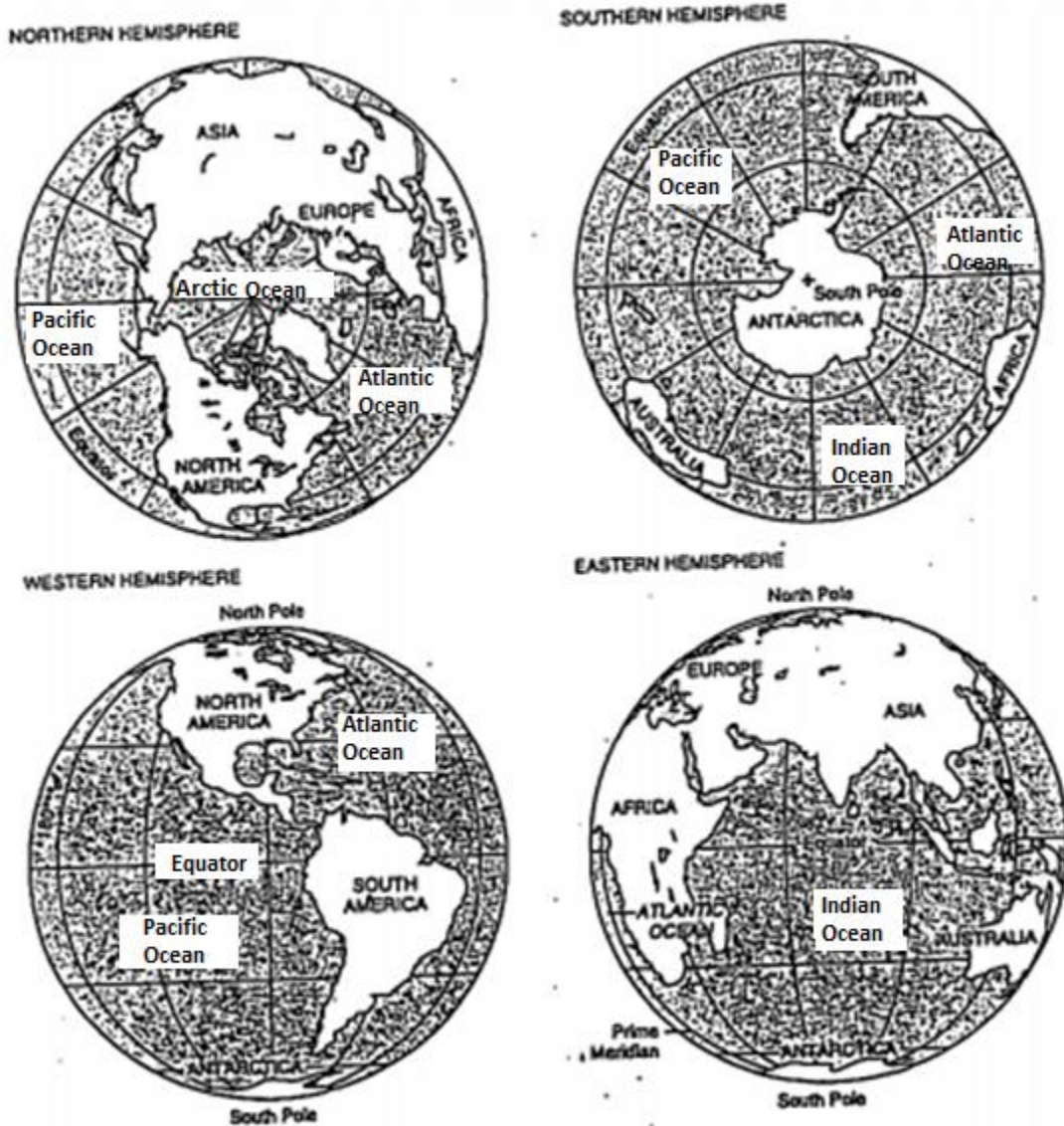


6. Which map would you use to judge the distance from Kuwait City and Al Wafra _____
7. Which Map would you use to tell you about Kuwait's location compared to other countries in the region _____
8. Which map would you use to figure out the distance from Bagdad to Kuwait City? _____

Hemispheres

Hemisphere is half of the earth. The earth can be divided into two in two different ways. When it is divided at 0 degrees latitude which is the equator, the two hemispheres are North and South. However, when it is divided by 0 degrees longitude or the Prime Meridian, the two hemispheres are East and West.

Directions: Study the illustrations of hemispheres below to answer questions.



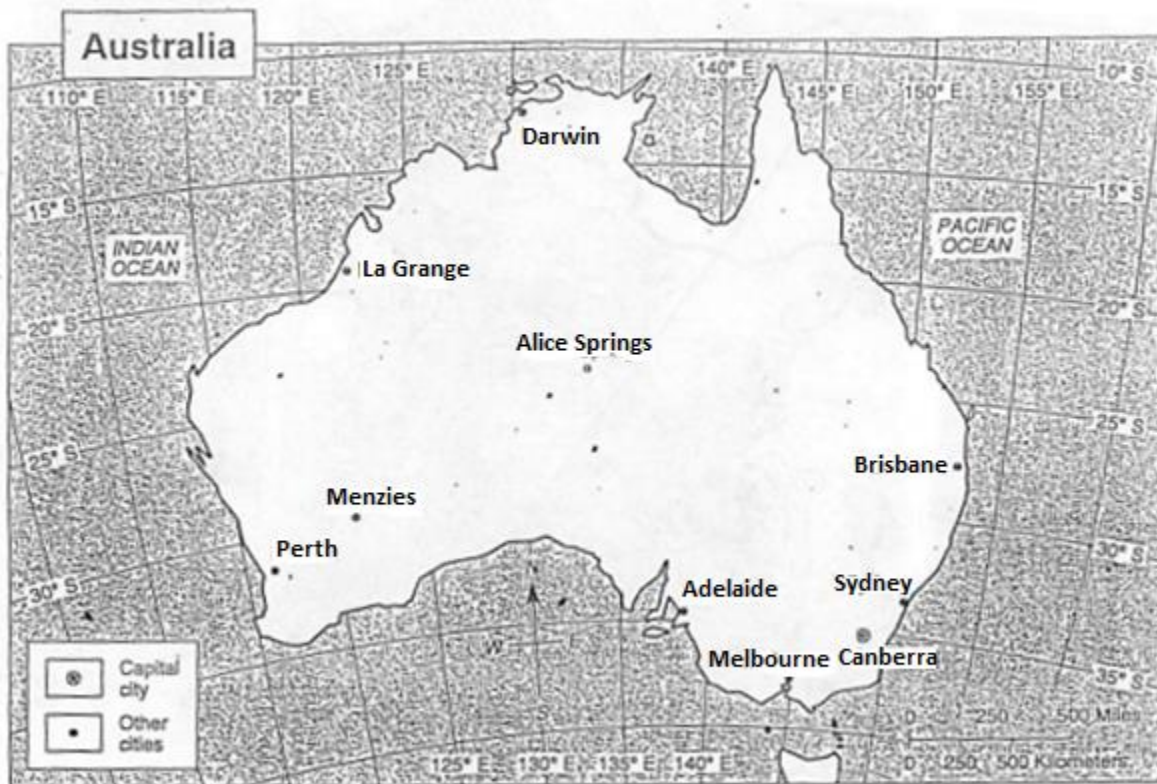
1. In which two hemispheres is the United States in? _____
2. What line divides the Eastern and Western Hemisphere _____
3. Which hemisphere is the only one that Antarctica is not located _____
4. Which hemisphere are both the United States and Europe located _____
5. What ocean is not found in the western hemisphere? _____

Using Latitude and Longitude

Every place on earth has two points, or coordinates, that mark its location.

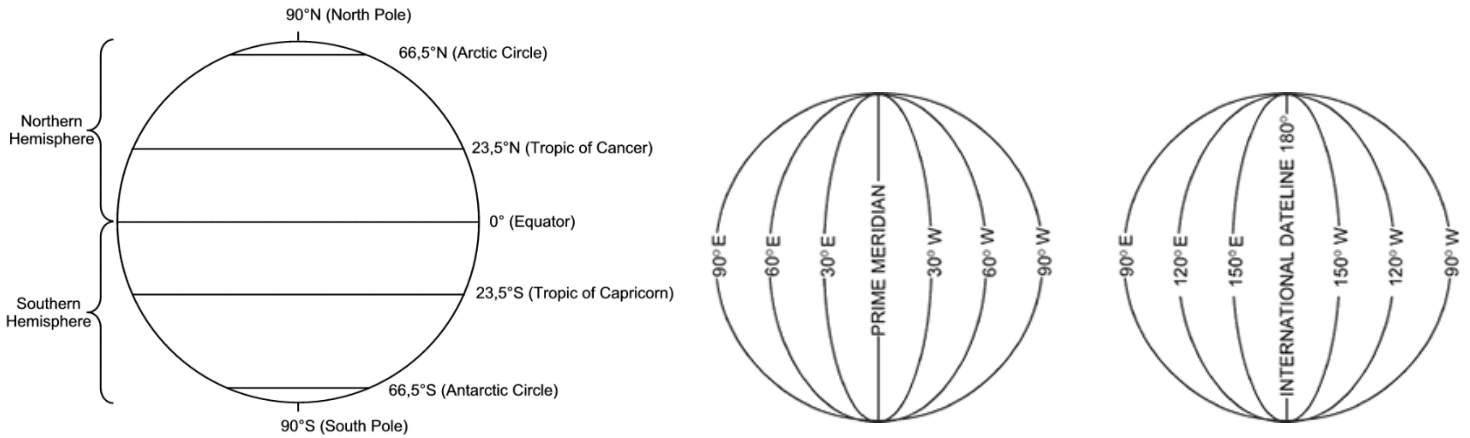
These coordinates are measured in degrees of latitude and degrees of longitude. Imagine that you want to find out where Beijing, China, is. You start with the index section of an atlas. This index gives you not only the page number of the map of China, but also the coordinates for Beijing: 40°N , 116°E . 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	_____	_____

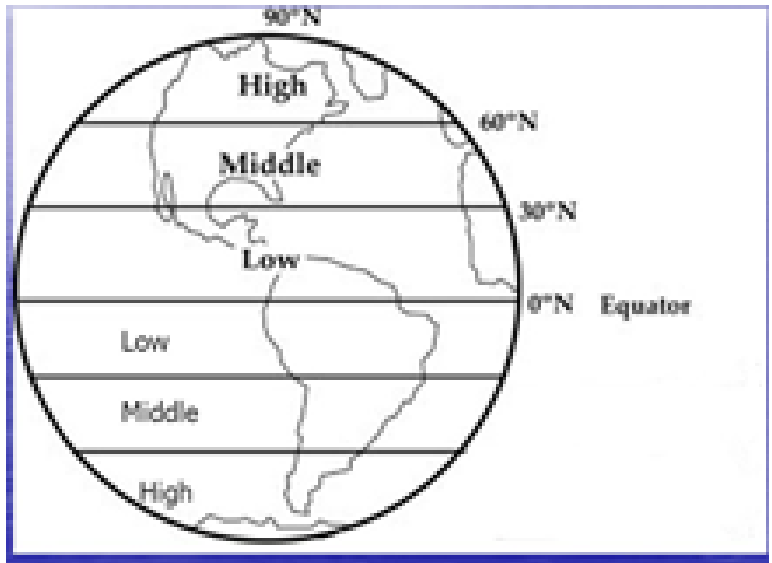
Important Lines of Latitude and Longitude



Latitude Lines are also called parallels because they are parallel to the Equator. The Equator is at 0 degrees latitude. Latitude lines run east to west but measure North and South because all lines of latitude are numbered by how many degrees they are north or south of the Equator.

Longitude Lines are called meridians. They all pass through the north and South poles. Although these lines run from north to south, they measure east and west. The line for 0 degrees Longitude is called the Prime Meridian which passes through Greenwich England. 180 degrees Longitude is considered the International Dateline where one day turns into another.

The globe is split up into
 Low latitudes which are near to the equator and are at low degrees
 Middle Latitudes are the middle third between the high and low zones
 High latitudes are near the north and south poles

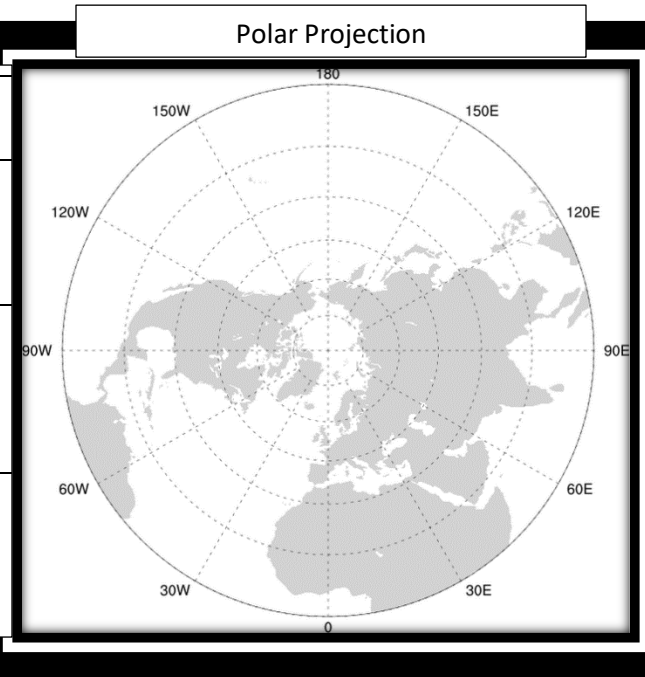
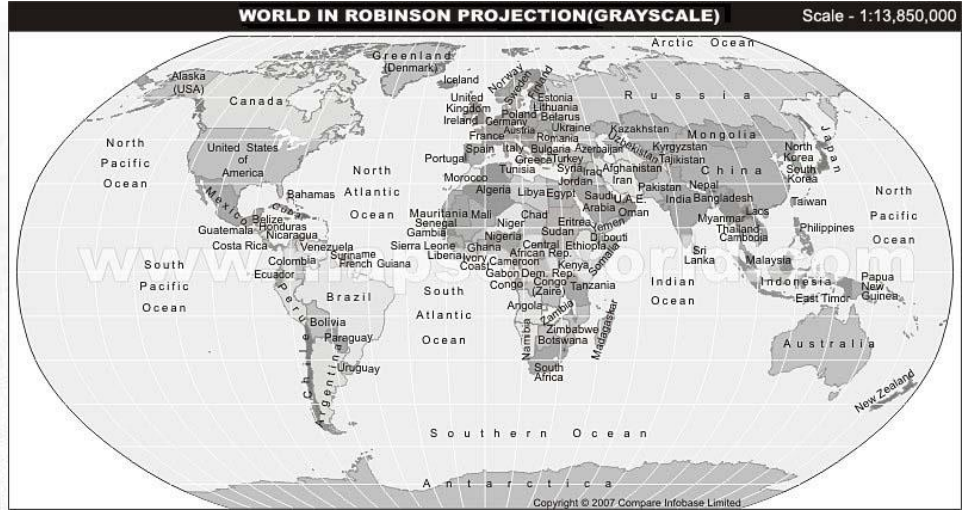
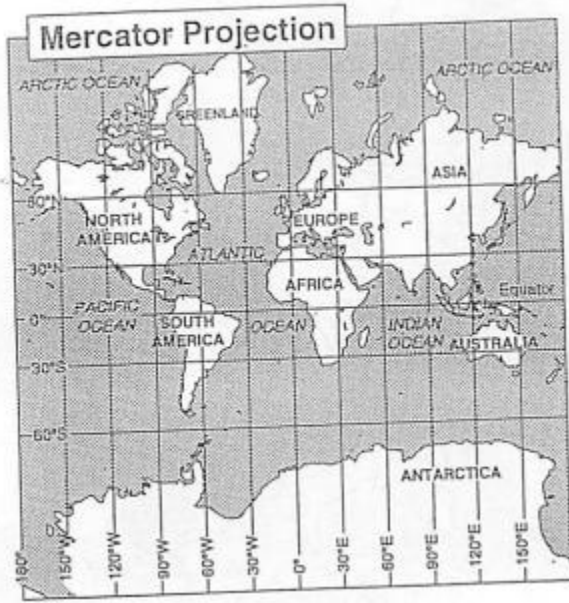


Directions: Answer the following questions:

1. Would the Tropic of Cancer be in the low, middle or high latitudes? _____
2. What degrees is the Equator _____
3. What degrees is the Prime Meridian _____
4. What degrees is the Arctic Circle _____
5. 180 degrees Longitude is called _____

Map Projections

How can you show a round earth on a flat map? The answer is that you can't do it without pushing some things around. When you push those things around it is called distortion. A map projection is a way of showing that 3D earth on a flat surface like a map. To minimize the problems caused by distortion, people use different map projections to serve different purposes.



Projection	What is Distorted	disadvantage	Advantage What is it used for
Robinson	Compromises Polar Areas	Hard to see poles	Shows minimal distortion so used by many schools
Mercator	Areas larger near the Poles	Polar areas look bigger. Greenland looks as big as South America & Africa	Shows true direction used by ship navigators
Polar	Latitude Lines	Can't see a lot of the world	Used by airline pilots to plot best route around globe

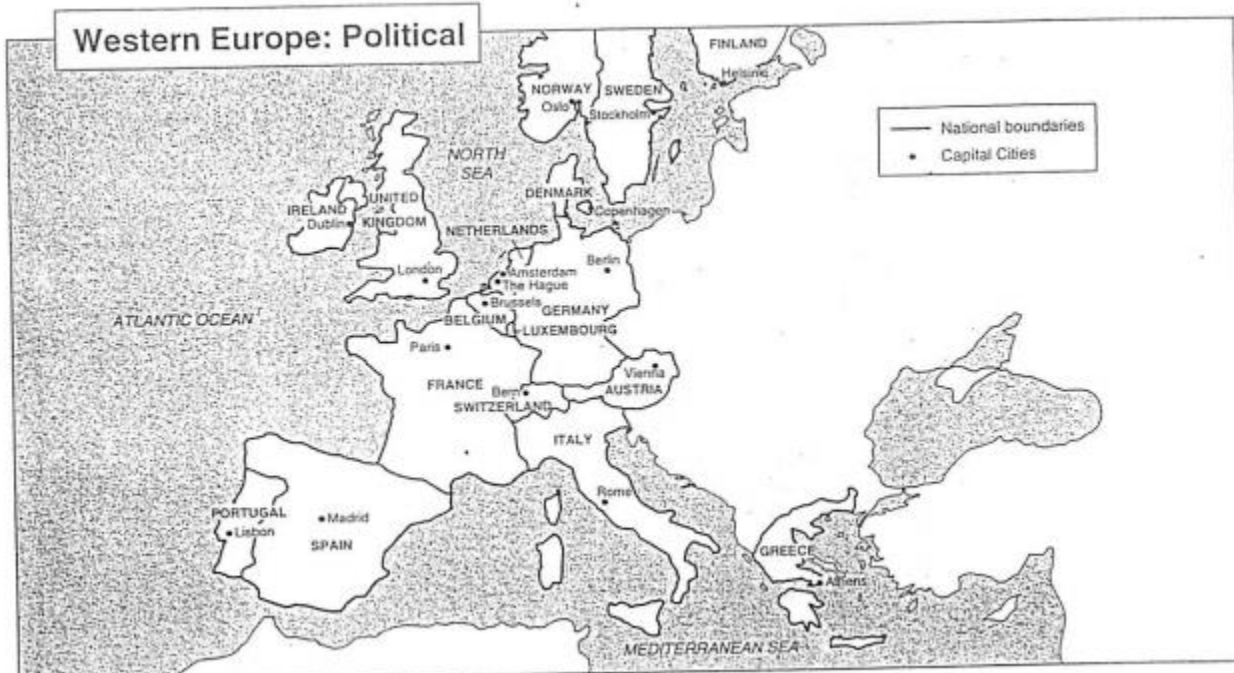
1. Which projection would I use if I was navigating a ship across the Atlantic Ocean _____
2. Which projection makes Greenland look much bigger than it really is? _____
3. Which projection is used by many schools _____
4. Which projection is used by pilots to go from US to Russia? _____
5. Which projection has latitude lines that look like circles? _____ -

Types of Maps

Reading Political Maps

A political map shows political (man created) features like border lines, capital cities or other cities and towns. Political maps often use colors to differentiate different countries, states, regions, etc.

Directions: Look at the map and key below and answer Questions



1. What does a solid black line on the map signify? _____
2. Which nations of Western Europe border on the Mediterranean Sea?

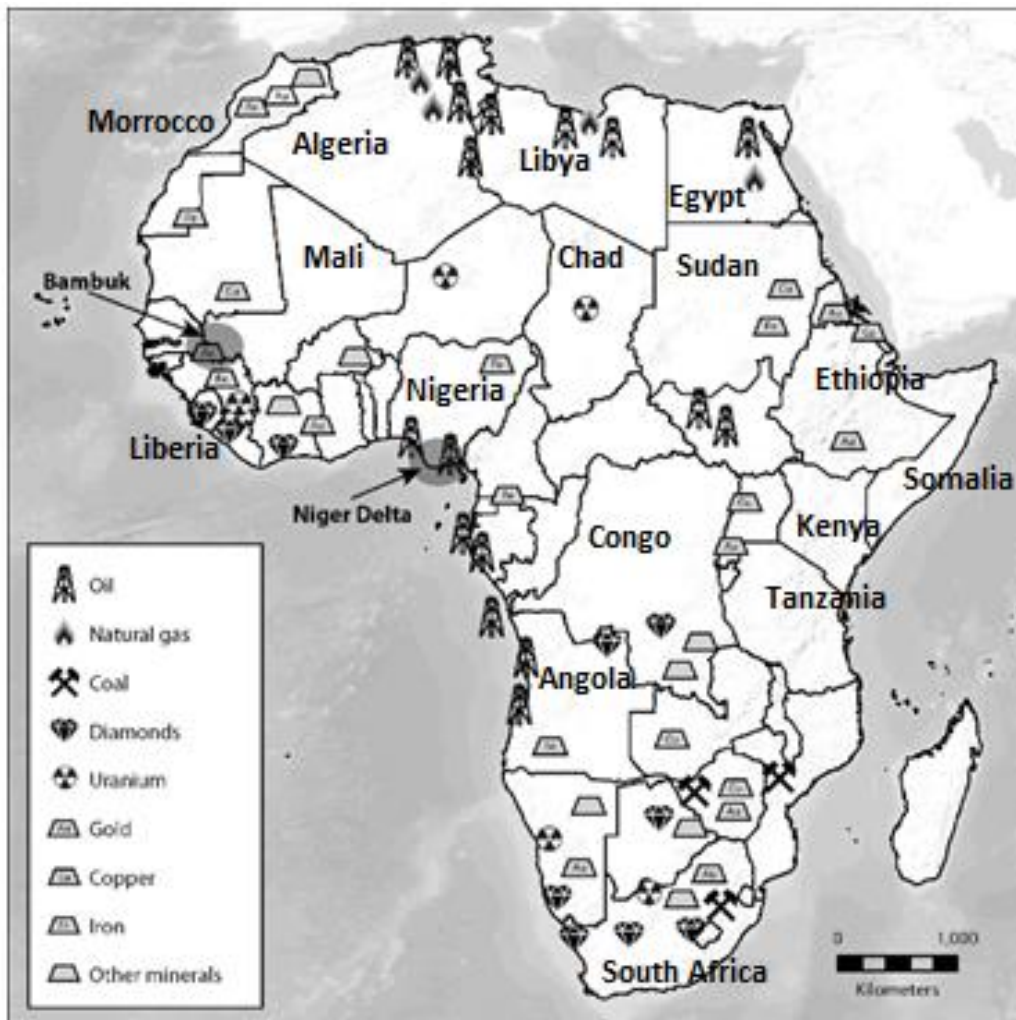
3. List the nations that share a border with Switzerland.

4. What is the capital of Spain? _____
5. What is the capital of Germany? _____
6. Which country lies closest to the North African coast? _____

Reading a Natural Resources Map

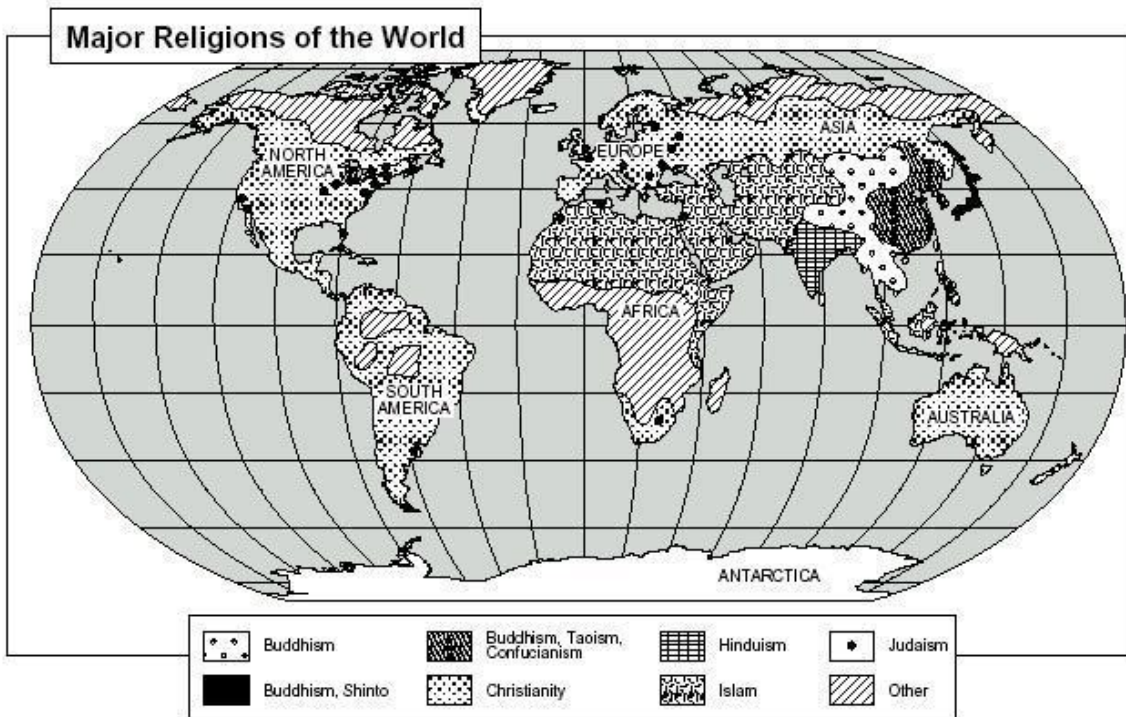
Natural Resource maps give a visual description of what resources a country has. It give an indication of a countrys natural wealth.

Directions: Look at the map below and answer the questions



1. If someone wanted to buy diamonds where might they go to
A. Egypt B. Mali C. South Africa D. Tanzania
2. If someone wanted to buy oil where might they go to
A. Congo B. Nigeria C. South Africa D. Kenya
3. If someone wanted to buy oil where might they go to
A. Libya B. Somalia C. Sudan D. Kenya
4. Coal can mostly be found in
A. Southern Africa B. Northern Africa C. Eastern Africa D. Western Africa
5. Uranium Can be found in
A. Angola B. Chad C. Morocco D. Ethiopia

Reading a Religion Map



1. Buddhism is found mainly in
 - A. North America
 - B. Asia
 - C. Europe
 - D. Australia

2. North Africa has many
 - A. Muslims
 - B. Shinto
 - C. Jews
 - D. Christian

3. Europe is mainly
 - A. Muslims
 - B. Shinto
 - C. Jews
 - D. Christian

4. North America is mainly
 - A. Muslims
 - B. Shinto
 - C. Jews
 - D. Christian

5. Hinduism is found mainly in
 - A. North America
 - B. Asia
 - C. Australia
 - D. Africa

Reading a Time Zone Map

Since the earth rotates, it is daylight in different parts of the planet. To deal with this problem, 24 time zones were created (one for each hour in a day). A time zone map helps you figure out what time it is. Eastern time zones are normally 1 hour later than the time zone to its west

Directions: Study the map below and answer the questions



1. If it is 4:00 PM in Georgia, what time is it in the state two time zones to the west
2. If it is 1AM in New Mexico, what time is it in Arkansas?
3. If it is 12 noon in Oklahoma, what time is it in Wisconsin?
4. If it is 12 AM in North Carolina, what time is it in California?
5. If it is 5 PM in Maine, what time is it in Arizona?

Reading a Contour Map

Reading a Contour Map tells you about elevation in a given place. The Isolines or lines represent slices of a the landscape to show the area's height above sea-level.

Study the map of Lord Howe Island and answer the questions

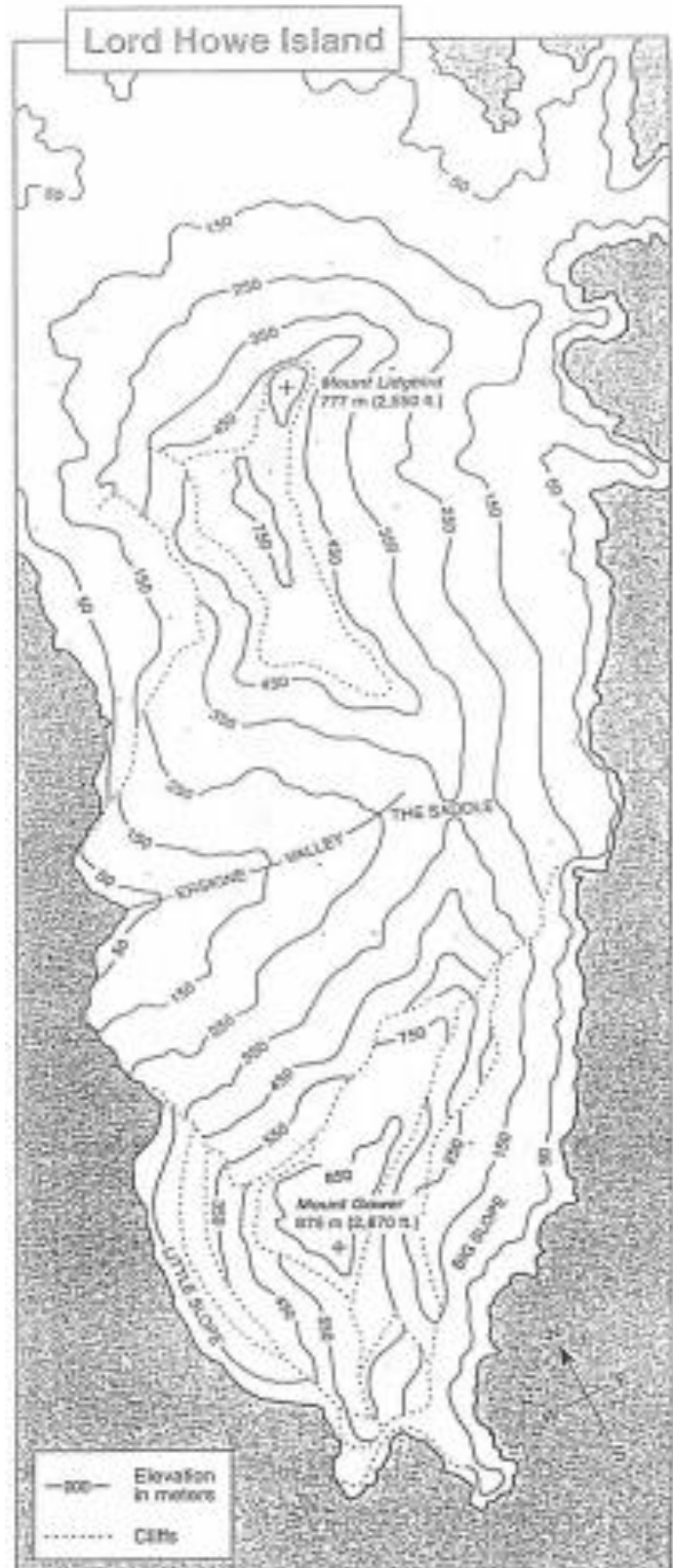
1. What elevation, in meters, does the first isoline inland from the coast represent?

2. What is the elevation of the highest point on Lord Howe Island?

3. Are the "Big Slope" and "The Saddle" at the same elevation or different ones

4. Is the island generally steeper near its northern part or near the southern part

5. Does the Northern or southern part of Mount Gower have the more gradual increase of elevation

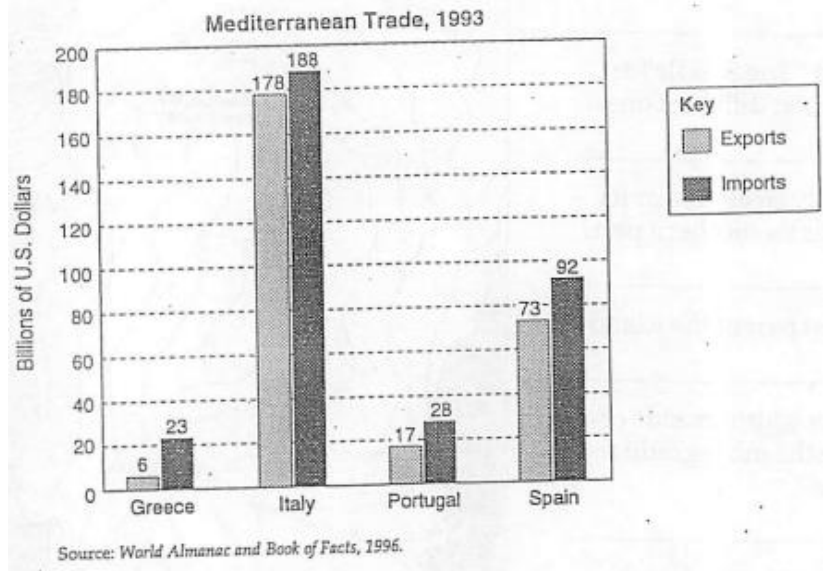


Reading a Bar Graphs

Bar graphs help compare the amounts of different things. Each bar represents the quantity of something. The size of the bar illustrates how much one item compares to other items. Below the bar graph shows the exports and imports from 4 Mediterranean countries.

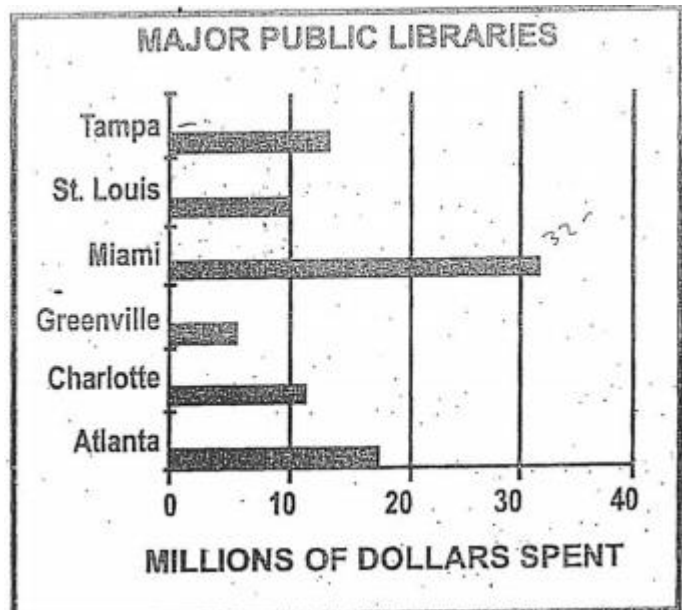
Study the bar graph and answer the questions

1. Which Country imported the most goods in 1993?
2. Which Country exported the fewest goods in 1993?
3. Roughly how much did Portugal import in 1993
4. How much did Italy export in 1993
5. Which country shows the greatest difference between the amount imported and the amount exported in 1993

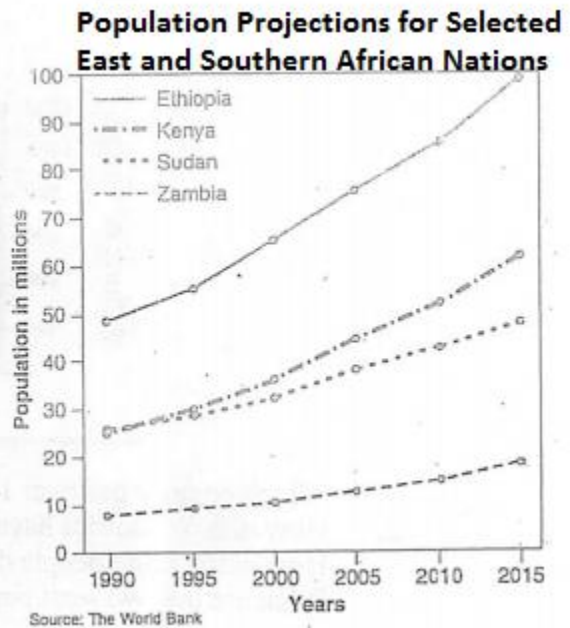
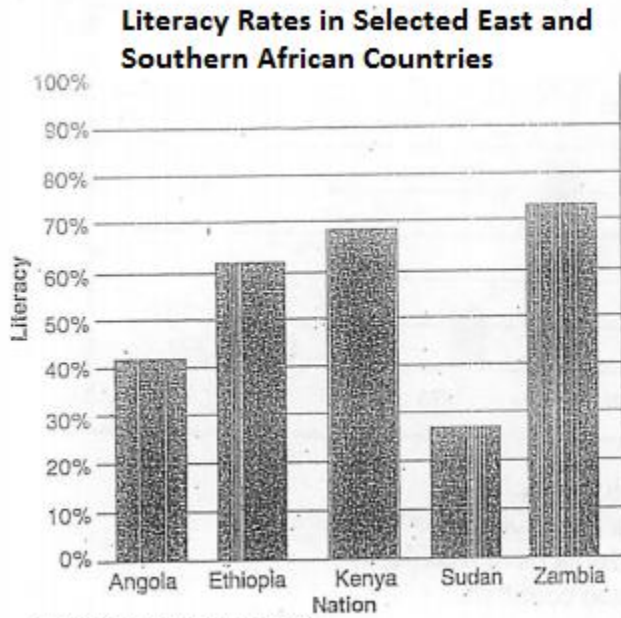


Bar graphs can either be vertical or horizontal. Below is a horizontal bar graph. It is important to read the X & Y axis to fully understand charts.

1. How much did St. Louis spend on libraries?
2. About how much did Atlanta spend on libraries
3. About how much did Greenville spend
4. How much more did Miami spend on their libraries than Charlotte
5. How much more did Atlanta spend on libraries than Greenville



Bar and Line Graphs



1. What information is presented in the line graph?

2. What information is presented in the bar graph?

3. In which countries shown on the bar graph can more than half the population read?

4. How much higher is the literacy rate in Zambia than in the Sudan?

5. Which country shown on the line graph had a population of about 48 million people in 1990?

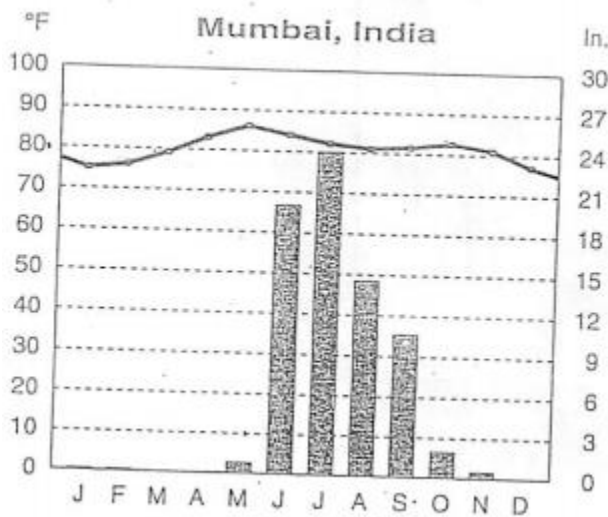
6. What is the population of the country from question 5 projected to be in 2015?

7. How would you describe population growth patterns in the four countries shown on the line graph?

Reading a Climate Graph

A climate graph consists of a line graph and a bar graph that provide information on temperature and precipitation. The line on the graph below shows average temperature in degrees Fahrenheit. The scale for the line graph is on the left. The bars show average precipitation in inches. The scale for the bars is on the right. Temperature and precipitation are given for each month of the year. Letters representing each month appear along the bottom of the graph. This climate graph shows temperature and precipitation for Mumbai (Bombay), India.

Directions: Study the climate graph. Then, answer the questions that follow.



1. What information is presented in the climate graph?

2. Which is the rainiest month in Mumbai? _____
3. During which months does Mumbai receive less than 3 inches of rain? _____
4. During which months does Mumbai receive more than 12 inches of rain? _____
5. How would you describe the temperature pattern of Mumbai? _____
5. Do you think the temperatures in Mumbai affect the amount of rainfall? Why or why not? _____

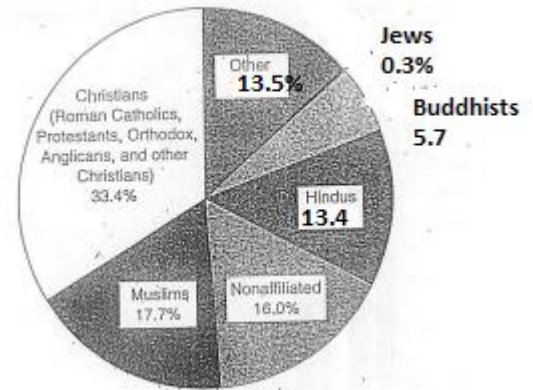
Pie Chart

A pie chart helps you compare parts with a whole. The complete circle represents all of something and each part represents a fraction of that whole. Together they account for 100%. The Pie Chart below represents religions in the world and how its population is divided among those religions

Study the Pie Graph and answer the Questions

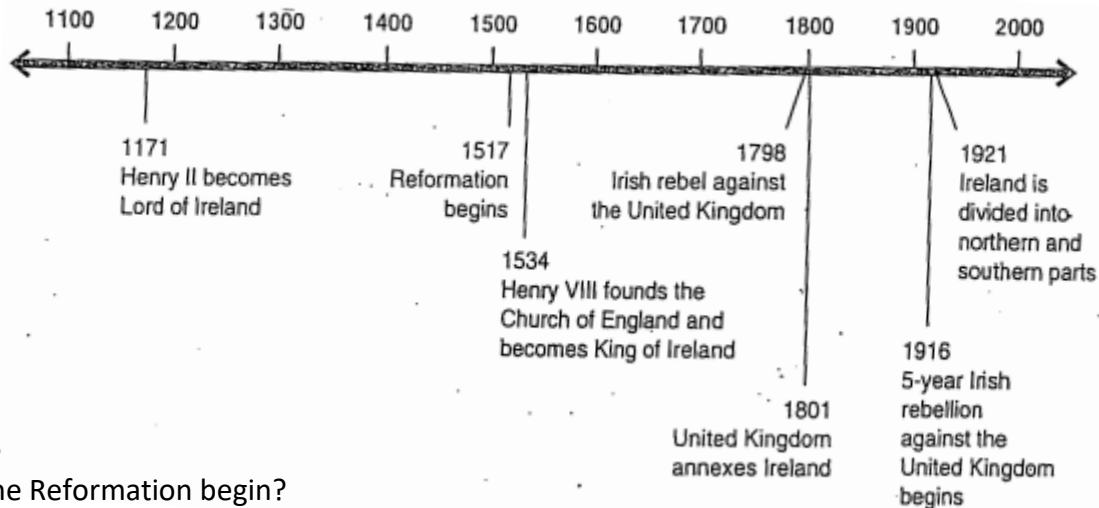
- What percentage of the world's population is Muslim? _____
- What percentage is Jewish?
- Which religious group has the most members?
- Which Religious group has the 2nd most members?
- How many more times greater than the Muslim population is the Christian population?

Estimated Religious Population of the World



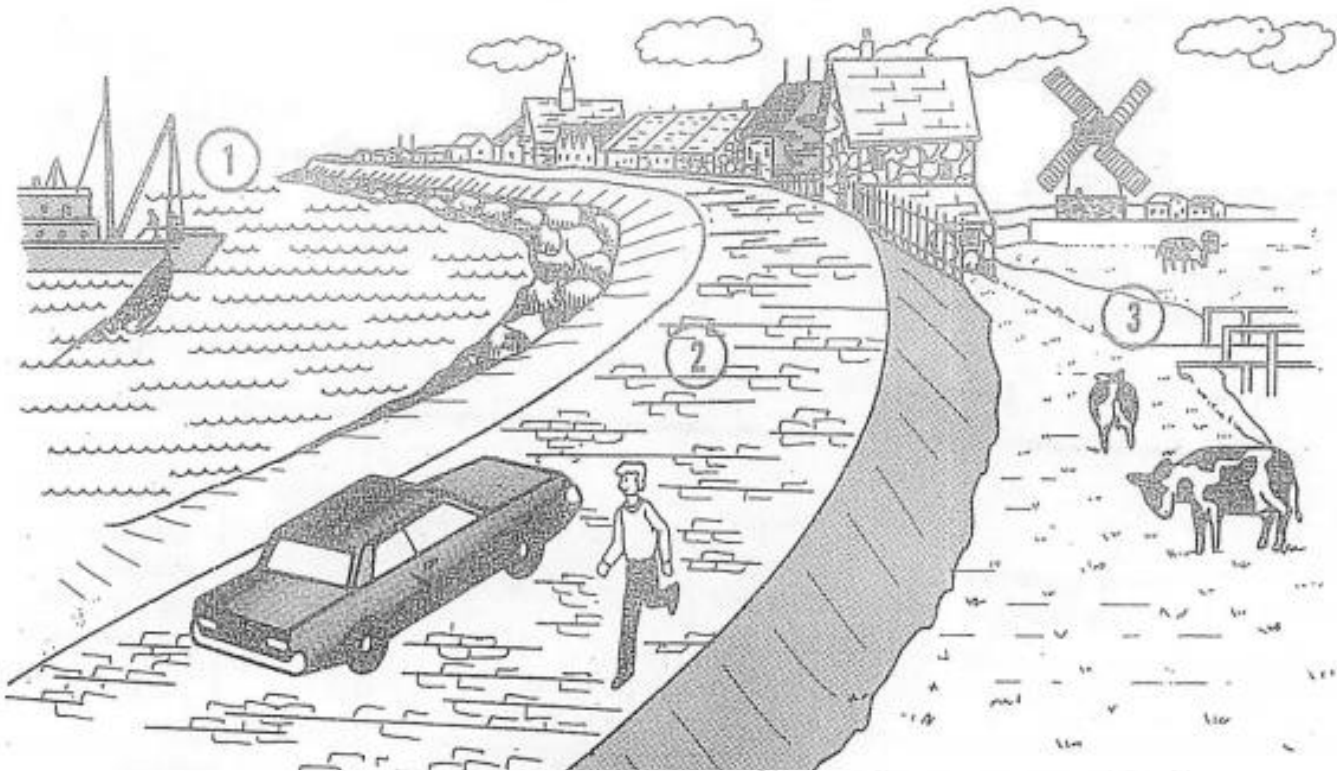
Reading a Time Line

Time lines show the order in which events happen and how long it is between events. The timeline below shows events in the United Kingdom



1. When did the Reformation begin?
2. How many years after that did Henry VIII establish the Church of England?
3. When does Henry II become Lord of Ireland
4. How many years passed between the United Kingdom's annexation of Ireland and the division of Ireland into two parts?
5. What event led to the division of Ireland into two parts?

KEEPING BACK THE SEA IN THE NETHERLANDS



THE NETHERLANDS: A seaside country whose people build walls to keep the sea from flooding the land.

1. In the picture, the water at ① on the left is the ocean. The ridge of land at ② is a *dike*. The houses and fields at ③ on the right are below the level of the ocean water.

From what you have read above and in the caption of the picture, and from what you see in the picture, try to list three ways that a dike is useful.

- _____
- _____
- _____

2. Notice that each house has a steep roof. There is a good reason for this. What might be the reason? The answer has to do with rainfall. _____

3. What is missing from the picture that helps explain why the houses are built of stone and brick? _____

4. In what way will the work of the people in the boat help feed other people? _____

5. The people who live on the land side of the dike keep close watch on the weather. Why would they be so careful? _____

TWO GREAT AFRICAN RIVERS—THE NILE AND THE CONGO



The Nile River flows through some of the world's driest land. The river water is used for crops. For short distances on each side of the river, the land blooms like a garden. Beyond that there is a great desert of sand, rocks, and scattered plants.

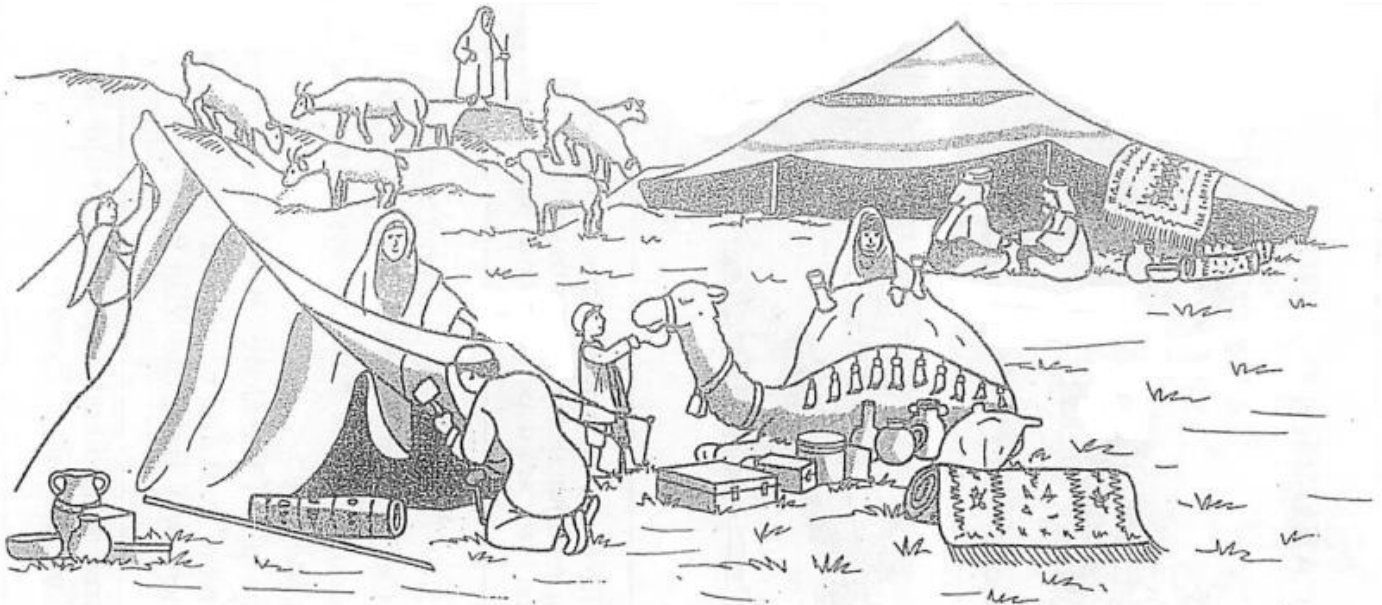
COMPARING TWO RIVERS

- After studying the pictures, their captions, and the maps, decide whether the statements below are true or false. Put a T before the true statements and an F before the false statements.
 - Both rivers are used for transportation.
 - Both rivers show boats that are driven by the wind.
 - Both rivers have thick forests on their banks.
 - The homes on the banks of both rivers are made of the same kinds of materials.
 - Both rivers flow through hot, wet lands.
 - The waters of the Nile River are used to water crops.

The Congo River flows through some of the world's wettest land. There are miles of jungles on both sides of the river. The people who live along the river are dependent on it for much of their food.

- The Nile River flows in a northward direction.
 - The Congo River flows toward the east.
 - The people of the Nile have at least two other ways to travel along the river.
 - The people of the Congo River use the river for fishing.
- 2a. What kind of land and vegetation would you expect to find a short distance away from the Nile River?
- b. What kind of land and vegetation would you expect to find a few miles from the Congo River?

DESERT FAMILIES SHARE THE WORK



MAKING A DESERT HOME IN NORTH AFRICA: Desert animal herders must be able to move quickly to places where there is grass and water. This whole camp can be put up or taken down in an hour or two.

1. Put a check before all the items in the list below that can be seen in the picture:

- | | |
|--------------------------------------|--|
| <input type="checkbox"/> Camels | <input type="checkbox"/> Two-wheeled carts |
| <input type="checkbox"/> Rugs | <input type="checkbox"/> Pottery |
| <input type="checkbox"/> Goats | <input type="checkbox"/> Horses |
| <input type="checkbox"/> Children | <input type="checkbox"/> Bells |
| <input type="checkbox"/> Sheep | <input type="checkbox"/> Trees |
| <input type="checkbox"/> Water well | <input type="checkbox"/> Roads |
| <input type="checkbox"/> Crops | <input type="checkbox"/> Pond |
| <input type="checkbox"/> Tractors | <input type="checkbox"/> Ropes and stakes |
| 2. <input type="checkbox"/> Shepherd | <input type="checkbox"/> Sticks |

2. What do you see in the picture that helps you to know that:

a. the people ride camels?

b. the people know how to weave?

c. the people eat cheese?

d. it can be cool on the desert?

e. vegetables are not an important part of the food eaten by the people? _____

f. the people cannot stay in one area too long? _____

Maps – Fact or Opinion?



Read the following statements about maps, and decide whether each one is a fact or an opinion. Color the facts **green** and color the opinions **blue**.

Remember:

A fact is something that is true about a subject, and can be tested or proved.

An opinion is what someone thinks about something.

1
Cartography is the science of making a map.

5
Maps look better than globes.

2
Cartography is very interesting.

9
Maps are used to find places, get directions and learn more about a specific geographic area.

6
Distances on maps are smaller than the actual distance they represent.

3
The symbols used in maps are funny.

10
Maps make road trips more stress-free.

7
People should always carry maps with them wherever they go.

4
If you want to know the average temperature in New York city, a climate map will help you.

8
It is possible to find out the elevation of different cities using a physical map.