

Resources

Library

Encyclopedia, atlas, almanac

Tourist information centers

Auto clubs, travel clubs, travel agents

Genealogical societies

Historic societies and museums

Cultural associations

College geography departments

Foreign embassies

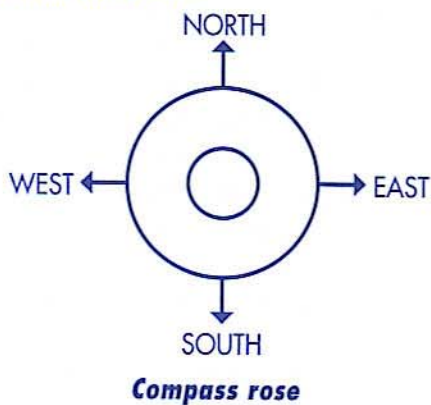
Computer programs and the Internet

Elements of a Good Map

Cartography is the science and art of making maps.

When you are making or reading a map, check for the following basic information:

1. **Title, author, and date.** The title can tell you whether the map will give the information for which you are looking. The date and author will give you clues as to the accuracy of the map (i.e., an older map may not be very up-to-date).
2. **Scale.** Scale is the system that reduces the land and oceans to sizes that fit on paper. On maps of large areas, the scale is usually measured in miles (or kilometers) per inch (or centimeter). Some maps might measure small areas in feet per inch.
3. **Directions.** A map should show the cardinal (main) directions of north, south, east, and west. Most maps have the north at the top, but it is wise to check the *compass rose* to be sure.



4. **Key or legend.** Maps usually use colors or symbols to represent features, such as roads, buildings, parks, lakes, rivers, or mountains. The only color most cartographers agree about is using blue for water features.

5. **Projection.** A three-dimensional globe is the most accurate map of the earth. Cartographers must cut, stretch, and distort some parts of the earth to get it to appear flat on paper. Some of these *projections* are better than others. To see this effect, compare the size of Greenland as represented on a globe and on a flat map.

Finding Longitude and Latitude

On most maps you will see lines that run east and west parallel to the equator, and other lines that run north and south between the North and South Poles.

The east-west lines (called *parallels* because they stay the same distance apart) are lines of *latitude*. They measure position north or south of the earth's equator.

The lines that connect the poles are lines of *longitude*. They are never parallel because their distance apart varies. Also called *meridians*, they measure position east or west of the prime meridian, which passes through Greenwich, England.

Example: Imagine that you are listening to a weather report about a hurricane. Many times, weather reporters give the coordinates of the hurricane so that people can follow the storm's movements on their map at home.

If the coordinates for a hurricane were given as 18 degrees north latitude and 77 degrees west longitude, you could find the hurricane on a map. Find the parallel of latitude marked 18 degrees north of the equator, and the line of longitude marked 77 degrees west of Greenwich, and follow the two lines until they meet. These coordinates would put the storm near Kingston, Jamaica, in the Caribbean Sea. Try this for yourself on a map or globe.

