

Additional material for- Globe a True Model of Earth

Latitudes

Latitude is a geographic coordinate that tells about the north-south position of a point on the surface of the earth. Latitude is an angle from zero degree to 90 degrees. Latitudes are Imaginary horizontal lines parallel to Equator. A yellow horizontal line running across the globe is the Equator. It divides the earth into two equal parts. Equator is equidistant from the north and south poles. Equator divides the area of the Earth into northern and southern hemispheres.

Hemisphere means half of a sphere. Equator is the largest latitude that runs on the globe. The size of the latitudes become small as we move towards the poles.

The important parallels of latitudes are:

- i) Tropic of Cancer ($23\frac{1}{2}^{\circ}$ N) and Arctic Circle at $66\frac{1}{2}^{\circ}$ N in the northern hemisphere.
- ii) Tropic of Capricorn ($23\frac{1}{2}^{\circ}$ S) and Antarctic Circle at $66\frac{1}{2}^{\circ}$ S in the southern hemisphere.

Longitudes

Longitude is a geographic coordinate that tells about the east–west position of a point on the surface of the earth. It is an angle that is measured in degrees.

These lines are connected from the north pole to the south pole. These lines are called Meridians of longitude. The main meridian is known as the Prime Meridian. It is an imaginary line, that divides the Earth vertically into two equal halves. Angle of the Prime meridian is 0 degree. A meridian that is opposite to the Prime Meridian is Anti-Meridian.

Latitudes and longitudes are like x, y axes on a graph, which will help us to locate a place on the map. Various phenomena of geography (*Climate, Rainfall, Time zones and others*) can be explained with the help of latitudes and longitudes.

Continents

Continent is a very large unbroken land mass completely surrounded by water. The Earth is divided into 7 continents namely Asia, Africa, North America, South America, Antarctica, Europe and Australia.

Asia is the largest continent area-wise and population-wise. It includes 50 countries. 60% of the total population of the world lives here. It is located primarily in the eastern hemisphere.

Asia covers one-third of earth's surface. Main countries in Asia are India, china Russia, Japan, Thailand, Indonesia, Afghanistan and others.

Africa is the second largest continent. It comprises of 54 countries. It is the hottest continent because Equator passes through it.

This continent was not habitable and remained unknown for thousands of years. So it was called as dark continent. Main countries in Africa are Angola, Egypt, Sudan, Algeria, Sudan, Libya, Ethiopia and others.

North America lies in the northern hemisphere and western hemisphere.

Main countries are United states, Canada, Mexico, Cuba, Greenland and others.

Next is South America. It comprises of 12 countries. Main countries are Argentina, Brazil, Peru, Columbia, Chile and others.

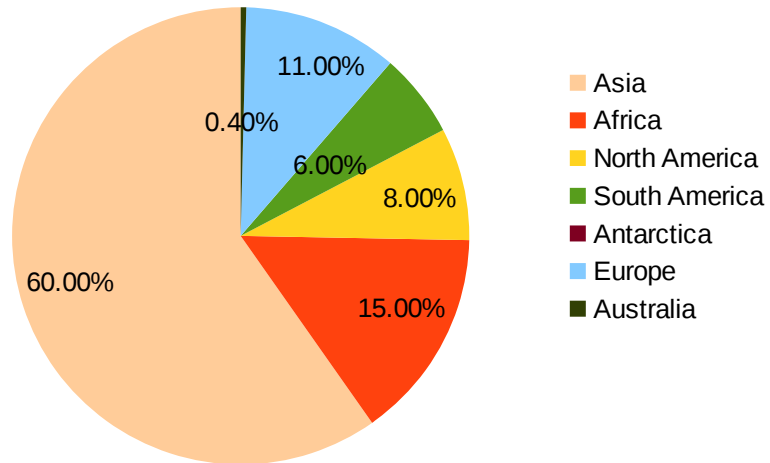
Europe comprises of 51 countries. Main countries in the Europe are France, Germany, United Kingdom, Italy, Finland, Ukraine and others.

Australia is situated in the southern hemisphere. Australia includes 14 countries. It is the smallest continent. It is the least populated continent after Antarctica, only 0.3% of the total Earth population lives here.

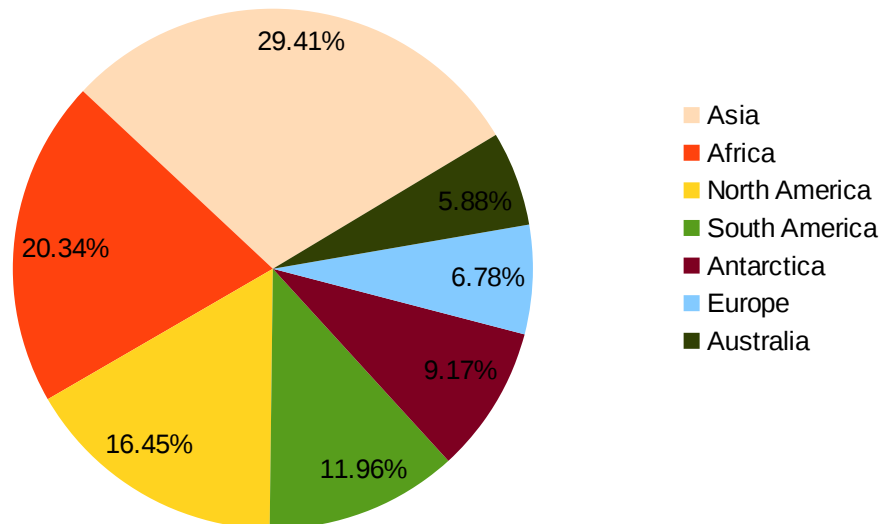
Next is Antarctica. It is the southernmost continent. Antarctica is completely covered with ice. It is a frozen continent or a cold desert. Antarctica has no countries and it has no permanent inhabitants.

Population and land area in each continent

Distribution of Population in various Continents



Distribution of Land Area in Various Continents



Oceans

About 72% of the earth is covered with water. World ocean or Global ocean is the interconnected system of water bodies. For convenience the water bodies have been grouped into oceans like Pacific Ocean, Atlantic Ocean, Southern Ocean, Indian Ocean and Arctic Ocean.

Pacific Ocean is the largest ocean. It lies between Asia, Australia, North and South America.

The Atlantic Ocean is the second largest ocean. It lies between North and South America, Africa and Europe.

Next is Indian Ocean. It extends below Indian sub-continent and spreads out between Australia and Africa. The Atlantic ocean meets the Indian ocean at south Africa.

The Southern Ocean. It is also called as the Antarctica ocean. It is the Ocean surrounding Antarctica.

The Arctic Ocean is the smallest ocean. It is on the North Pole. It touches North America in the Western hemisphere and Asia in the Eastern hemisphere.