:Geography:

Geography is the of the physical features of the earth including how humans affect the earth and are affected by it.

Geography deals with physical aspects of the earth.the Composition the layers of the earth the atmosphere the Plants and animals mountains rivers and other landforms. But it also analyzes how humans have affected those Physical feature and how the arrangement of those features Has affected humans. All of these things are covered by Geography.

Geography is both science and Arts

Geography is the study of the physical features of the earth And its atmosphere and of human activity as it affects and Is affected by these including the distribution of populations And resources and political and economic activities.

Definitions of human geography

- The branch of geography deals with how human activit or is influence by the earths surface.
- The study of different ways in which human societies develop and operate in relation to their physical environment.
- The interaction between human beings and their environment in particular places and across spatial areas.
- The five themes of human geography

  The are five main themes of geography:

  *Location

  *Place

  *Human-enviroment interaction

  *Movement

  *Region
- Collectively these five themes encompass the whole of the subject of geography.

(1)Location

Location is kind of like the first step in understanding an aspect of the earth and involves providing a reference to describe where a particular place is on earth. This could be an absolute location where a location is based on a definitive

reference that rarely changes such as latitude or longitude or an address. Or it could be a relative location. Where a place is described relative to its enviroment or its connection to other places.

(2)place

Place is a description of the physical and human of the location being studied. This could involve describing the mountains valleys rivers beachea and the living organisms that inhabit it.

(3)Human environment interaction

Human enviroment interaction is the study of how humans affect the environment and how the environment affects humans can have positive impacts on the environment or negative ones.And we can even disagree about whether an impact is positive or nagative. e.g # lack of ecosystem.

(4)Movement

Movement involves describing and discussing the effect of any thing that moves across the earth. Very often is related to humams movement of humans themselvea goods services immigration and soforth. The migration of animals can also play a part especially when looking at change in a landscapw over long periods of time.

(5)Region

Region is about classifying the parts of the earth.we humans love to draw borders and put names labels and categories on things even when those borders and labels are mostly made up region considers how the land is split up into continents regions countries counties states and cites.

Example # Political Region
Cultural Region.
Agricultural Region etc.

Physical Themes Of Geography

- **Atmosphere**
- **Hydrosphere**
- **Lithosphere**
- **Biosphere**

Atmosphere

The atmosphere contains all the air in Earth's system .It extends from less than 1 m below the planet's surface to more than 10,000 km above the planet's surface. The upper portion of the atmosphere protects the organisms of the biosphere from the sun's ultraviolet radiation.

It also absorbs and emits heat. When air temperature in the lower portion of this sphere changes, weather occurs. As air in the lower atmosphere is heated or cooled, it moves around the planet. The result can be as simple as a breeze or as complex as a tornado.

The atmosphere is made up of many layers that differ in chemical composition and temperature. For the purpose of this module, however, we will not differentiate among the layers of the atmosphere. The word "atmosphere" will be used in reference to all of the layers.

Hydrosphere

The hydrosphere contains all the solid, liquid, and gaseous water of the planet. It ranges from 10 to 20 kilometers in thickness. The hydrosphere extends from Earth's surface downward several kilometers into the lithosphere and upward about 12 kilometers into the atmosphere.

A small portion of the water in the hydrosphere is fresh (non-salty). This water flows as precipitation from the atmosphere down to Earth's surface, as rivers and streams along Earth's surface, and as groundwater beneath Earth's surface. Most of Earth's fresh water, however, is frozen.

Ninety-seven percent of Earth's water is salty. The salty water collects in deep valleys along Earth's surface. These large collections of salty water are referred to as oceans. The image above depicts the different temperatures one would find on oceans' surfaces. Water near the poles is very cold (shown in dark purple), while water near the equator is very warm.

The differences in temperature cause water to change physical states. Extremely low temperatures like those found at the poles cause water to freeze into a solid such as a polar icecap, a glacier, or an iceberg. Extremely high temperatures like those found at the equator cause water to evaporate into a gas.

Some scientists place frozen water--glaciers, icecaps, and icebergs--in its own sphere called the "cryosphere." For the purpose of this module, however,

frozen water will be included as part of the hydrosphere. The word "hydrosphere" will be used in reference to all water in Earth's system.

Lithosphere

The lithosphere contains all of the cold, hard solid land of the planet's crust (surface), the semi-solid land underneath the crust, and the liquid land near the center of the planet. *The surface of the lithosphere is very uneven (see image at right). There are high mountain ranges like the Rockies and Andes (shown in red), huge plains or flat areas like those in Texas, Iowa, and Brazil (shown in green), and deep valleys along the ocean floor (shown in blue).

The solid, semi-solid, and liquid land of the lithosphere form layers that are physically and chemically different. If someone were to cut through Earth to its center, these layers would be revealed like the layers of an onion (see image above). The outermost layer of the lithosphere consists of loose soil rich in nutrients, oxygen, and silicon.

Beneath that layer lies a very thin, solid crust of oxygen and silicon. Next is a thick, semi-solid mantle of oxygen, silicon, iron, and magnesium. Below that is a liquid outer core of nickel and iron. At the center of Earth is a solid inner core of nickel and iron.
The word "lithosphere" can take on different meanings depending on the speaker and the audience.

For Example:

many geologists--scientists who study the geologic formations of Earth--reserve the word "lithosphere" to mean only the cold, hard surface of

Earth, not the entire inside of the planet. For the purpose of this module, however, there will be no distinction among the various layers of land. The word "lithosphere" will be used in reference to all land in Earth's system.

Biosphere

The biosphere contains all the planet's living things. This sphere includes all of the microorganisms, plants, and animals of Earth.

Within the biosphere, living things form ecological communities based on the physical surroundings of an area. These communities are referred to as **biomes**. Deserts, grasslands, and tropical rainforests are three of the many types of biomes that exist within the biosphere.

It is impossible to detect from space each individual organism within the biosphere. However, biomes can be seen from space. For example, the image above distinguishes between lands covered with plants (shown in shades of green) and those that are not.

Some scientists place humans in their own sphere called the "**anthrosphere.**" For the purpose of this module, however, humans will be included as part of the biosphere. The word "biosphere" will be used in reference to all living things in Earth's system.