

# Geography - Global Caretakers

<b>Biome</b>	A very large community of plants and animals living together in a certain kind of climate. A biome can contain several ecosystems.
<b>Climate</b>	The usual (average) patterns of weather (including temperature and rainfall) in an area of the Earth's surface over a long period of time.
<b>Climate Change</b>	Any significant long-term change in the expected patterns of average weather of a region (or the whole Earth) over a significant period of time.
<b>Climate Zones</b>	Divisions of the Earth's climates into general climate zones according to average temperatures and average rainfall.
<b>Ecosystem</b>	All of the living things (plants, animals and organisms) in a given area, interacting with each other and also with their non-living environments (e.g. climate, soil) An ecosystem may be small (e.g. underneath a stone) or very large (e.g. a whole rainforest).
<b>Vegetation Belt</b>	An area with distinct plant types, determined by climate, soil, drainage and elevation.

## Biomes

Biomes are areas of our planet with similar climates, landscapes, animals and plants.

What lives in each biome depends on:

- how warm or cold it is
- how dry or wet it is
- how fertile the soil is

The animals in a biome depend upon plants for food. The plants in a biome often also depend upon the animals for spreading pollen and seeds so that new plants can grow. So both plants and animals rely on each other to stay alive.

Types of biomes: Aquatic, Forest, Grassland, Desert, Rainforest, Tundra.

## Vegetation Regions/Belts

Scientists divide the Earth's land into what are called vegetation regions. These areas have distinct types of plants, soil, and weather patterns. Vegetation regions can be divided into five major

types: forest, grassland, tundra, desert, and ice sheet. Climate, soil, the ability of soil to hold water, and the slope, or angle, of the land all determine what types of plants will grow in a particular region.

## Climate Zones

The world is split into 6 climatic zones.

- Polar
- Temperate
- Arid
- Tropical
- Mediterranean
- Tundra



The weather changes in different parts of the world.

Where there are similar weather patterns this is known as a climate. At the top of the Earth there is an arctic climate and some of the coldest temperatures in the world are found here.

Temperate climates are found a bit further south, and as you approach the equator you find Mediterranean and desert climates. Some of the hottest places on Earth are found here, and few people live in this climate. At the equator there is a tropical climate, and travelling south of the equator it gets cooler again before reaching the Antarctic.



## Resources around the world



Natural resources are not evenly distributed all over the world. Some places are more endowed than others — for instance, some regions have lots of water (and access to ocean and seas). Others have lots of minerals and forestlands. Others have metallic rocks, wildlife, fossil fuels and so on.

## What are human and physical features of geography?

We separate geography into two main areas; Physical and human geography.

Physical geography: Natural. Including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

Human geography: Man made. Including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Human activities have greatly affected the supply and quality of natural resources. Cars and factories use vast amounts of petroleum products every day. About 40 percent of the world's electricity comes from coal-fired power plants. Such widespread use of fossil fuels is depleting reserves of these limited resources. Burning fossil fuels also impacts other natural resources by releasing toxic materials into the air, water, and soil.

Even renewable resources must be carefully managed to avoid misuse. Deforestation, mining, and land development have transformed natural areas, destroying ecosystems and harming soil and water supplies. Building dams and levees and redirecting water flow for irrigation have affected water quality and distribution in many areas.



## Food Distribution



In general, food distribution is composed of a variety of companies, organizations and programs that collect food from producers, store it in warehouses, and then distribute the food to manufacturers, grocery stores, restaurants, cafeterias, government aid programs and more.

