



# Biogeography

## Biogeography Vocabulary

Name:

Section:

Directions: Use the following terms and definitions to assist as you complete course materials.

### Biogeography Course Vocabulary

Number	Word	Definition	Unit
1.	Biogeography	The study of the geographic distribution of species of plants and animals.	Unit I – Physical Geography
2.	Botany	The scientific study of plant life, related to the field of biology.	Unit I – Physical Geography
3.	Climate Change	The gradual change over time of the earth's climate as a result of natural and man-made processes.	Unit I – Physical Geography
4.	Climatology	The study of the earth's climate and the forces that impact it, with an emphasis on the changes over time in patterns and weather.	Unit I – Physical Geography
5.	Continent	Large landmasses, usually agreed upon the existence of 7 (Africa, Antarctica, Asia, Europe, North America, Oceania, South America)	Unit I – Physical Geography
6.	Continental Drift Theory	First proposed in 1912 by Alfred Wegener, theory explain the gradual movement of tectonic plates, and helps explain the distribution of similar species of plants and animals on different continents.	Unit I – Physical Geography
7.	Earth Science	Branch of scientific study dealing with the physical processes of the planet and atmosphere.	Unit I – Physical Geography
8.	Ecology	The scientific study of the relationship between organisms and their environment.	Unit I – Physical Geography
9.	Environment	The surroundings or conditions which a person, plant, or animal exists in.	Unit I – Physical Geography
10.	Erosion	The gradual process of changing the landscape caused by humans, ice, water, and wind, in the forms of Splash, Gully, Sheet, Rill, and Bank Erosion.	Unit I – Physical Geography
11.	Fauna	The animal species that exist within a certain geographical area.	Unit I – Physical Geography
12.	Flora	The plant life that exists within a certain geographical area.	Unit I – Physical Geography
13.	Geomorphology	The study of the historical changes in the earth's topography.	Unit I – Physical Geography
14.	Global Warming	The gradual increase in the earth's temperature as a result of the release of greenhouse gases into the atmosphere.	Unit I – Physical Geography
15.	Hemisphere	Geographic regions divided into North and South by the equator, and East and West by the Prime Meridian.	Unit I – Physical Geography
16.	Landform	Naturally formed topographic physical features of the planet's surface.	Unit I – Physical Geography

17.	Latitude	East to West Reference lines, used to determine location North or South.	Unit I – Physical Geography
18.	Longitude	North to South Reference lines, used to determine location East or West.	Unit I – Physical Geography
19.	Milankovitch Theory	Scientific Theory related to the effect of the earth's eccentricity (orbital pattern), and obliquity (tilt along axis) on the climate of earth.	Unit I – Physical Geography
20.	Physical Geography	The study of the spatial characteristics of the various natural phenomena associated with the Earth's surface and atmosphere.	Unit I – Physical Geography
21.	Plate Tectonics	Parts of the earth's crust, divided into oceanic and continental plates, that make up the planet's lithosphere.	Unit I – Physical Geography
22.	Qualitative Data	Observable, but not measurable, data of quality traits (such as color).	Unit I – Physical Geography
23.	Quantitative Data	The collection of measures of counts or values.	Unit I – Physical Geography
24.	Region	A geographic area with common characteristics.	Unit I – Physical Geography
25.	Season	Annual changes in climate due to earth's position in relation to the sun, resulting in changes in daylight, temperature, or weather patterns.	Unit I – Physical Geography
26.	Water cycle	The process by which water evaporates from the earth's surface, condenses in the atmosphere, and falls back to the earth as precipitation.	Unit I – Physical Geography
27.	Weather	Temporary changes in precipitation, overcast, wind speed, ect... Can vary wildly from day to day	Unit I – Physical Geography
28.	Weathering	Changes in appearance caused over prolonged periods of time by precipitation, wind, chemical reactions, or biological organisms.	Unit I – Physical Geography
29.	Zoology	Scientific study of animal life, related to the study of biology.	Unit I – Physical Geography
30.	<b>Adaptation</b>	<b>The process of change which a species undergoes to be better suited for its environment.</b>	<b>Unit II – Principles of Biogeography</b>
31.	Adaptive Radiation	The diversification of a species into forms filling different ecological niches.	Unit II – Principles of Biogeography
32.	Allochthonous Endemism	Species that are endemic to a location, but not originally from that particular geographic area.	Unit II – Principles of Biogeography
33.	Ancestral Biotas	The original flora and fauna that inhabited a geographical area.	Unit II – Principles of Biogeography
34.	Autochthonous Endemism	Species that are endemic, and are only found in the place where they originate from.	Unit II – Principles of Biogeography
35.	Barriers	Biotic or abiotic features that restrict the movement of genes or individuals from one place to another.	Unit II – Principles of Biogeography

36.	Biodiversity	The variety and variability of species of plants and animals in a geographical area.	Unit II – Principles of Biogeography
37.	Center of Origin	Geographic location from which a certain species expanded from.	Unit II – Principles of Biogeography
38.	Convergence	Two independent species that evolve separately, but appear to be a single disjunct species	Unit II – Principles of Biogeography
39.	Cosmopolitan Species	A species that is distributed in a wide variety of geographic locations.	Unit II – Principles of Biogeography
40.	Disjunction	A species that is found in two disconnected geographical areas, but not found between them.	Unit II – Principles of Biogeography
41.	Dispersal	The permanent or semi-permanent movement of species from one geographic location to another.	Unit II – Principles of Biogeography
42.	Distribution	The way a species is spread out or arranged within a geographic area.	Unit II – Principles of Biogeography
43.	Diversification	The development of new subspecies of animals, typically through the processes of evolution and adaptation. Can also refer to the maintaining of a multitude of types of species in an ecosystem.	Unit II – Principles of Biogeography
44.	Endemic Species	Plants or animals that exist in only one particular geographic region.	Unit II – Principles of Biogeography
45.	Evolution	Gradual change of characteristics over space and time within a species, based on the inheritance of desirable traits.	Unit II – Principles of Biogeography
46.	Extinction	The elimination of a species, taxon. Can happen to individual species, or in mass waves of extinction events (currently 6 <sup>th</sup> wave).	Unit II – Principles of Biogeography
47.	Fire Ecology	The study of the causes and effects of fire, and its role in the changing of an ecosystem.	Unit II – Principles of Biogeography
48.	Glaciation	The covering of a landscape in glaciers, resulting in geomorphological changes in the topography.	Unit II – Principles of Biogeography
49.	Island Biogeography	Subdiscipline of Biogeography that focuses on the uniqueness, or lack of, islands in terms of the ecosystems present relative to nearby islands or continents	Unit II – Principles of Biogeography
50.	Persistence	The lack of movement by a particular species, anti-dispersal.	Unit II – Principles of Biogeography
51.	Phylogeography	Study of the historical processes responsible for contemporary distributions of plants and animals.	Unit II – Principles of Biogeography
52.	Population	The number of a given species, or individuals with a specific characteristic, in a specified area	Unit II – Principles of Biogeography
53.	Provincialism	The existence of many endemic flora and fauna in a distinct geographic location.	Unit II – Principles of Biogeography
54.	Range	The geographic area over which an organism lives or occurs.	Unit II – Principles of Biogeography
55.	Specialization	Species that develops a characteristic that	Unit II – Principles of Biogeography

		better allows them	
56.	Speciation	Evolutionary process by which organisms become distinct species.	Unit II – Principles of Biogeography
57.	Species	A group of living organisms characterizes as genetic similarity between individuals capable of passing on genes or interbreeding.	Unit II – Principles of Biogeography
58.	Taxon	Subdivisions of plants or animals, divided by species, family, or class.	Unit II – Principles of Biogeography
59.	Theory of Evolution	Scientific Theory published by Charles Darwin in <i>Origin of Species</i> in 1859, connected to ideas of gradual change over time and survival of the fittest.	Unit II – Principles of Biogeography
60.	Variation	Physical differences in characteristics between individuals of the same species.	Unit II – Principles of Biogeography
61.	Vicariance	Geographical range of a taxa is split into parts by the formation of a barrier	Unit II – Principles of Biogeography
62.	Baseline	Idea connected to Panbiogeography,-a major geological feature, such as an ocean or marine basin on a global scale, or a river or mountain chain on a continental scale which a track passes over.	Unit III - Applied Biogeography
63.	Geographic Information Systems (GIS)	Computer programs designed to collect, store, analyze, and share geographic data.	Unit III - Applied Biogeography
64.	Geospatial Modeling	Predictive representations based off the presence of observed qualitative or quantitative geographic data points.	Unit III - Applied Biogeography
65.	Node	Idea connected to Panbiogeography,-area where two or more tracks intersect.	Unit III - Applied Biogeography
66.	Observation	The process of viewing something in an attempt to collect data to arrive at some scientific truth.	Unit III - Applied Biogeography
67.	Panbiogeography	Cartographically mapping out distributions of taxon to determine connections and center of origin. Used to predict evolution of species over space and time.	Unit III - Applied Biogeography
68.	Scientific Theory	An explanation of an aspect of the natural world that can be repeatedly tested, in accordance with the scientific method, using a predefined protocol of observation and experiment.	Unit III - Applied Biogeography
69.	Track	Idea connected to Panbiogeography,-A track is the graphic representation of the spatial structure present in a distribution with respect to the minimum distances between the individual localities of a taxon.	Unit III - Applied Biogeography