

1. **abiotic factors:** Nonliving components of environment
2. **adaptation:** Inherited characteristic that increases an organism's chance of survival
3. **algae:** A very simple plant without stems or leaves that grows in or near water and carries out photosynthesis.
4. **analyze:** to look at something carefully by attention to its parts
5. **angiosperms:** Flowering plants that produce seeds in fruit
6. **archaeobacteria:** Ancient prokaryote (organism with no nucleus); live in extreme conditions
7. **artificial selection:** Breeding organisms by humans with specific, desired traits in order to produce offspring with identical traits.
8. **atmosphere:** The envelope of gases surrounding the earth or another planet
9. **biosphere:** Consists of all life on Earth and all parts of the Earth in which life exists, including land, water, and the atmosphere.
10. **biotic factors:** All the living components of an ecosystem
11. **carnivore:** An organism that obtains energy by eating other animals
12. **climate:** The average overall weather conditions occurring in an area over a long period of time.
13. **coevolution:** Process in which two or more species evolve in response to changes in each other
14. **community:** A group of interdependent species of organisms inhabiting the same region and interacting with each other
15. **conclusion:** A summary based on evidence or facts
16. **condensation:** A change of state from a gas to a liquid due to cooling or compression.
17. **conduction:** The direct transfer of heat from one substance to another substance that it is touching.
18. **controlled variable:** Factor in an experiment that a scientist purposely keeps the same
19. **convection current:** the movement of a fluid or gas, caused by differences in temperature. A process of heating, rising, cooling and sinking that transfers heat from one part of the material to another
20. **crust (lithosphere):** The thin and solid outermost layer of the Earth above the mantle
21. **data:** Facts, figures, and other evidence gathered through observations.
22. **decomposers/detritivores:** Organisms that obtain energy by feeding on the remains of other organisms or waste products and then returning the nutrients to the ecosystem.
23. **deep currents:** Currents that are caused by the differences in the density of ocean water. These currents, flowing near the ocean floor, move and mix water around the world.
24. **deep zone:** The bottom layer of the ocean that extends from the base of the thermocline to the ocean floor into which no light penetrates.
25. **ecology:** The study of the interrelationships between organisms and with their environment
26. **ecosystem:** A biological community of interacting biotic organisms and their abiotic physical environment
27. **environmental science:** The field of study that looks at interactions among human systems with those found in nature
28. **erosion:** Processes by which rock, sand, and soil are broken down and carried away (i.e. weathering, glaciation)
29. **eubacteria:** A kingdom that contains all prokaryotes (organisms with no nucleus) except archaeobacteria
30. **evaporation:** The change in state of matter from a liquid to a gas usually by heating the material.
31. **evolution:** Change in a species over time; process by which modern organisms have descended from ancient organisms.
32. **experiment:** a scientific procedure undertaken to make a discovery, test a hypothesis, or demonstrate a known fact
33. **fungi:** A kingdom of heterotrophic organisms that have no means of movement, reproduce by using spores, and get food by breaking down substances in their surroundings and absorbing the nutrients
34. **geosphere (lithosphere):** The mostly solid, rocky part of the Earth; extends from the center of the core to the surface of the crust
35. **glacier:** A slowly moving mass or river of ice formed by the accumulation and compaction of snow on mountains or near the poles. They contain about 60% of all the fresh water on Earth
36. **gymnosperm:** a plant, like a pine, whose seeds are usually developed inside a cone.
37. **habitat:** The natural home or environment of an animal, plant, or other organism where that organism lives.
38. **hydrosphere:** All the water at or near the surface of the earth, 97% of which is in oceans
39. **hypothesis:** A testable prediction, often implied by a theory, and verified through experimentation
40. **invertebrates:** Large group (phyla) of organisms in the kingdom Animalia including insects, worms, sea stars, and mollusks that do not have backbones
41. **knowledge:** Skills, experience, and expertise coupled with information and intelligence that creates a person's intellectual resources
42. **magma:** A molten mixture of rock-forming substances, gases, and water from inside the Earth
43. **manipulated (independent) variable:** the one variable that is purposely changed to test a hypothesis

44. **mantle:** The layer of hot, semi-solid rock material between Earth's crust and core.
45. **natural selection:** A process in which individuals that have certain favorable inherited traits tend to survive and reproduce at higher rates than other individuals because of those traits.
46. **observation:** The act of noticing and describing events or processes in a careful, orderly way.
47. **ozone layer:** Protective stratospheric layer in atmosphere that shields earth from most UV radiation.
48. **population:** A group of individuals that belong to the same species and live in the same area.
49. **precipitation:** Any form of water that falls from clouds and reaches Earth's surface.
50. **prediction:** A logical statement about what will happen if the hypothesis is correct.
51. **protista:** A widely varied kingdom of mostly one-celled eukaryotic organisms that have some similarities, but yet, are different from plants, animals, bacteria, and fungi.
52. **pseudoscience:** a collection of beliefs or practices mistakenly regarded as being based on scientific method.
53. **qualitative data:** Descriptive information describing color, odor, shape, or some other physical characteristic.
54. **quantitative data:** Numerical facts and information associated with mathematical models and statistical techniques used to analyze spatial location and association.
55. **radiation:** The transfer of energy and heat in all directions by electromagnetic waves.
56. **resistance:** A trait possessed by certain individuals that are exposed to a chemical, such as antibiotics or pesticides, and survive. They then pass these traits to their offspring -leading to the need to create ever stronger chemicals to combat them.
57. **responding (dependent) variable:** A factor in an experiment that is observed and measured; that changes in response to the manipulated variable.
58. **Richter scale:** Rates an earthquake's magnitude based on the size of its seismic waves.
59. **science:** An organized way of gathering and analyzing evidence about the natural world.
60. **scientific method:** A series of steps followed to solve problems including collecting data, formulating a hypothesis, testing the hypothesis, and stating conclusions.
61. **surface currents:** A horizontal movement of ocean water that is caused by wind and that occurs at or near the upper layers of the ocean.
62. **surface zone:** In open ocean, the warm, top layer of water in which photosynthesis can occur.
63. **tectonic plates:** Sections of the Earth's lithosphere that consist of the crust and the rigid, outermost part of the mantle; and move due to convection currents causing earthquakes, volcanoes and mountain building.
64. **thermocline:** In large bodies of water, a distinctive temperature transition zone that separates an upper layer that is mixed by wind and a colder, deep layer that is not mixed.
65. **trials:** the number of times an experiment is repeated.
66. **tributaries:** Smaller rivers or streams that flow in to a larger main river or lake; a branch of the river.
67. **vertebrates:** Large group (phyla) of organisms in the kingdom Animalia including fish, reptiles, and birds that have backbones.
68. **water (hydrologic) cycle:** interdependent and continuous circulation of water from the ocean, to the atmosphere, to the land, and back to the ocean.
69. **weather:** The state of the atmosphere at a place and time as regards heat, dryness, sunshine, wind, rain, etc.
70. **yeast:** One of the only single celled organisms within the kingdom fungi.