



abiotic	a non-living component of an ecosystem
adaptation	A change in structure, function, or behaviour by which a species or individual improves its chance of survival in a specific environment. Adaptations develop as the result of natural selection operating on random genetic variations that are capable of being passed from one generation to the next. Variations that prove advantageous will tend to spread throughout the population.
adaptive radiation	the diversification of a group of organisms into forms filling different ecological niches
allele	Any of the possible forms in which a gene for a specific trait can occur. In almost all animal cells, two alleles for each gene are inherited, one from each parent. Paired alleles (one on each of two paired chromosomes) that are the same are called homozygous, and those that are different are called heterozygous. In heterozygous pairings, one allele is usually dominant, and the other recessive. Complex traits such as height and longevity are usually caused by the interactions of numerous pairs of alleles, while simple traits such as eye colour may be caused by just one pair.
amniotic egg	an egg that can be laid on land due to the presence of a fluid-filled amniotic sac that cushions and protects the developing embryo
analogous	Similar because of convergent evolution, and not because of common ancestry. Two characters are analogous if the two lineages evolved them independently. e.g. bird and bats wings. See also homologous,
biotic	a living component of an ecosystem
biotic potential	The potential growth of a population if it could grow in perfect conditions with no limiting factors.
bipedal	describing an animal that typically walks on two legs.
bony skeleton	a skeleton formed from hardened bone, not cartilage.
carrying capacity	The largest number of individuals of one species that an environment can support.
cladistics	classification of organisms based on the branching of descendant lineages from a common ancestor.
cladogram	A branching treelike diagram used to illustrate evolutionary (phylogenetic) relationships among organisms.
common ancestor	an ancestor shared by two or more lineages.
competition	the demand for resources, such as food, water, and shelter, in short supply in a community
convergent evolution	Process in which two distinct lineages evolve a similar characteristic independently of one another. This often occurs because both lineages face similar environmental challenges and selective pressures.
dominant	Relating to the form of a gene that expresses a trait, such as hair colour, in an individual organism. The dominant form of a gene overpowers the

	counterpart, or recessive, form located on the other of a pair of chromosomes.
ecosystem	All of the populations of different species that live together in the same area at the same time AND the non-living factors
evolution	change in the gene pool of a population from generation to generation by such processes as mutation, natural selection, and genetic drift.
gene	A segment of DNA, occupying a specific place on a chromosome, that is the basic unit of heredity. Genes act by directing the production of RNA, which determines the synthesis of proteins that make up living matter and are the catalysts of all cellular processes. The proteins that are determined by genetic DNA result in specific physical traits, such as the shape of a plant leaf, the coloration of an animal's coat, or the texture of a person's hair. Different forms of genes, called alleles, determine how these traits are expressed in a given individual. Humans are thought to have about 35,000 genes, while bacteria have between 500 and 6,000.
gene pool	the total genetic information in the gametes of all the individuals in a population.
genealogy	a family history.
genetic drift	random changes in the frequency of alleles in a gene pool, usually of small populations.
genetic variation	Genetic variation is the difference in DNA among individuals or the differences between populations. There are multiple sources of genetic variation, including mutation and genetic recombination. Mutations are the ultimate sources of genetic variation, but other mechanisms such as sexual reproduction and genetic drift contribute to it as well.
genotype	The genetic makeup of an organism as distinguished from its physical characteristics. Compare phenotype.
heterozygous	When the two alleles for a particular gene on a pair of chromosomes are different (i.e. Tt, Ff).
homologous	Inherited from a common ancestor. Human eyes and mouse eyes are homologous structures because we each inherited them from our common ancestor that also had the same sort of eyes. Contrast this with analogous.
homozygous	When the two alleles for a particular gene on a pair of chromosomes are the same (i.e. TT, tt).
hypothesis	a testable statement about the natural world that can be used to explain an observation and or make an inference.
inherited trait	characteristic that is passed on from parents to offspring via genes; something an organism is born with
limiting factor	things that prevent a population from growing any larger. Anything that restricts the size of the population .
lineage	any continuous line of descent; those organisms connected by heredity from ancestor to descendent.

most recent common ancestor	the most recently shared ancestor of two or more lineages.
mutation	a change to an organism's DNA
natural selection	a process in which organisms possessing certain traits that make them better adjusted to an environment tend to survive and reproduce
niche	The function or position of a species within an ecological community. A species' niche includes the physical environment to which it has become adapted as well as its role as producer and consumer of food resources.
phenotype	The physical appearance of an organism as distinguished from its genetic makeup. The phenotype of an organism depends on which genes are dominant and on the interaction between genes and environment. Compare genotype.
population	the number of all of the organisms that belong to the same species
population density	The size of a population compared to the amount of space available
predator	An animal that lives by capturing and eating other animals.
prey	An animal hunted or captured by another for food.
quadrupedal	describing an animal that typically walks on four legs.
recessive	Relating to the form of a gene that is not expressed as a trait in an individual unless two such genes are inherited, one from each parent. In an organism having two different genes for a trait, the recessive form is overpowered by its counterpart, or dominant, form located on the other of a pair of chromosomes.
tetrapod	an animal having four limbs for terrestrial locomotion.
trait	characteristic of an organism