

Glossary

allele - another form of a gene. Alleles come in pairs and are located at specific positions on chromosomes. An organism has two alleles for each trait. For example, in Mendel's pea experiments, seed shape for pea plants can be expressed in two forms: one allele for round shape (R) and one for wrinkled shape (r).

biological evolution - descent with modification through genetic inheritance, and not simply change over time.

ecological niche - the place where an organism lives and the roles that it plays in its habitat.

gene pool - the total collection of genes in a population at any one time.

genetic recombination - when two parents' alleles are shuffled and transmitted to offspring. It is one of the mechanisms leading to variation.

genotype - an organism's genetic composition or genetic makeup.

inheritance - genetic traits are inherited from parents and passed on to offspring.

natural immunity - an inherited ability to remain resistant to or unaffected by a specific disease.

natural selection - the process by which evolution occurs. Organisms with traits that are favourable to survival in a given environment are more likely to live and pass on their genes to the next generation. Selection can only work on genetic variation that is already present.

organism - any living thing (including animals, plants and fungi). An organism may be single-celled or multicellular.

phenotype - the observable characteristics of an organism.

population - a group of individuals of the same species living in the same place at the same time. It is the smallest unit that can evolve.

species - a group of individuals that are capable of interbreeding and producing fertile offspring.

variation - all life forms vary genetically both within and among populations. Natural selection works upon this genetic variation.