

1. <b>adaptation</b>	inherited characteristic that improves an organism's ability to survive and reproduce in a particular environment	22. <b>genus</b>	a classification grouping that contains similar, closely related organisms
2. <b>allele</b>	one of a number of different forms of a gene	23. <b>haploid</b>	term used to refer to a cell that contains only a single set of genes
3. <b>analogous Structures</b>	structures that are not the same in form but are used for the same purpose	24. <b>heterozygous</b>	having two different alleles for a particular gene
4. <b>anticodon</b>	group of three bases on a tRNA molecule that are complementary to the three bases of a codon of mRNA	25. <b>homologous</b>	term used to refer to chromosomes in which one set of comes from the male parent and one set from the female parent
5. <b>artificial Selection</b>	The selective breeding of domesticated plants and animals to encourage the occurrence of desirable traits.	26. <b>homologous Structures</b>	Structures that are similar in different species of common ancestry
6. <b>base pairing</b>	principle that bonds in DNA can form only between adenine and thymine and between guanine and cytosine	27. <b>homozygous</b>	having two identical alleles for a particular gene
7. <b>binomial nomenclature</b>	Classification system in which each species is assigned a two-part scientific name	28. <b>incomplete dominance</b>	situation in which one allele is not completely dominant over another allele
8. <b>clade</b>	a group of species that includes a single common ancestor and all descendants of that ancestor	29. <b>independent assortment</b>	one of Mendel's principles that states that genes for different traits can segregate independently during the formation of gametes
9. <b>cladogram</b>	a diagram that is based on patterns of shared, derived traits and that shows the evolutionary relationships between groups of organisms	30. <b>karyotype</b>	micrograph of the complete diploid set of chromosomes grouped together in pairs, arranged in order of decreasing size
10. <b>codominance</b>	situation in which the phenotypes produced by both alleles are completely expressed	31. <b>meiosis</b>	process in which the number of chromosomes per cell is cut in half through the separation of homologous chromosomes in a diploid cell
11. <b>codon</b>	group of three nucleotide bases in mRNA that specify a particular amino acid to be incorporated onto a protein	32. <b>messenger RNA</b>	type of RNA that carries copies of instructions for the assembly of amino acids into proteins from DNA to the rest of the cell
12. <b>crossing-over</b>	process in which homologous chromosomes exchange portions of their chromatids during meiosis	33. <b>monophyletic group</b>	a group that contains a single ancestral species and all its descendants and excludes any organisms that are not descended from that common ancestor.
13. <b>derived character</b>	Characteristic that appears in recent parts of a lineage, but not in its older members	34. <b>multiple allele</b>	a gene that has more than two alleles
14. <b>diploid</b>	term used to refer to a cell that contains two sets of homologous chromosomes	35. <b>natural Selection</b>	A process in which organisms with certain inherited characteristics are more likely to survive and reproduce than are organisms with other characteristics
15. <b>DNA polymerase</b>	principal enzyme involved in DNA replication	36. <b>nondisjunction</b>	error in meiosis in which the homologous chromosomes fail to separate properly
16. <b>evolution</b>	Change in a kind of organism over time; process by which modern organisms have descended from ancient organisms.	37. <b>pedigree</b>	chart that shows the presence or absence of a trait according to the relationships within a family across several generations
17. <b>fitness</b>	ability of an organism to survive and reproduce in its environment	38. <b>phenotype</b>	physical characteristics of an organism
18. <b>fossil</b>	The preserved remains or traces of an organism that lived in the past	39. <b>polygenic trait</b>	trait controlled by two or more genes
19. <b>gamete</b>	sex cell	40. <b>polypeptide</b>	long chain of amino acids that makes proteins
20. <b>genetics</b>	scientific study of heredity		
21. <b>genotype</b>	genetic makeup of an organism		

41. <b>polyploidy</b>	condition in which an organism has extra sets of chromosomes.
42. <b>principle of dominance</b>	Mendel's second conclusion, which states that some alleles are dominant and others are recessive
43. <b>probability</b>	likelihood that a particular event will occur
44. <b>Punnett square</b>	diagram that can be used to predict the genotype and phenotype combinations of a genetic cross
45. <b>replication</b>	process of copying DNA prior to cell division
46. <b>restriction enzyme</b>	enzyme that cuts DNA at a sequence of nucleotides
47. <b>ribosomal RNA</b>	type of RNA that makes up the major part of ribosomes
48. <b>RNA</b>	single-stranded nucleic acid that contains the sugar ribose
49. <b>segregation</b>	separation of alleles during gamete formation
50. <b>sex chromosome</b>	one of two chromosomes that determines an individual's sex him him him him him
51. <b>sex-linked gene</b>	a gene located on a sex chromosome
52. <b>systematics</b>	the classification of living organisms in terms of their natural relationships; it includes describing, naming, and classifying the organisms
53. <b>taxa</b>	Groups of living things which have been organized according to biological meaning
54. <b>tetrad</b>	structure containing four chromatids that forms during meiosis
55. <b>trait</b>	specific characteristic of an individual
56. <b>transfer RNA</b>	Type of RNA that transports amino acids to the ribosome to make a protein.
57. <b>transformation</b>	process in which one strain of bacteria is changed by a gene or genes from another strain of bacteria
58. <b>vestigial Structures</b>	remnant of a structure that may have had an important function in a species' ancestors, but has no clear function in the modern species