

alleles	alternative forms of a gene
chromosomes	thread-like structures made of DNA, observed in dividing cells
dominant allele	the form of a gene which is expressed in the heterozygous (hybrid) condition, masking the other (recessive) form of the same gene
gene	the smallest physical unit of heredity
genetics	the study of heredity and variation in biological systems

genotype

all the genes present
in the cells of an
organism

heterozygous

having two different alleles of
a particular gene in a diploid
cell for any particular
hereditary characteristic

homozygous

having identical alleles of a
particular gene in a diploid
cell for any particular
hereditary characteristic

hybrid

the offspring from the
cross-breeding of two
distinct races, breeds,
varieties, species or genera

Mendel's laws

the set of principles derived by
Gregor Mendel relating to the
transmission of hereditary
characteristics from parent
organisms to their children

monohybrid

the offspring of individuals that are pure-breeding for different alleles of a particular gene

pedigree analysis

the study of a pedigree chart in a group of related individuals to determine the pattern and characteristics of inheritance of a genetic trait

pedigree chart

a universally accepted scientific format to represent the inheritance of a particular genetic trait over a number of generations

phenotype

the detectable physical, chemical or behavioural characteristics or traits of an organism

pure-breeding

homozygous

recessive allele

the form of a gene which is only expressed in the homozygous condition, and is masked in the heterozygous condition by another (dominant) form of the same gene

segregate

separate (as in individual chromosomes that segregate from each homologous pair during meiosis)

variation

physical, or physiological or behavioural difference between individuals in a population which may or may not make them more suited to prevailing environmental conditions
