

1. **alleles** alternative forms of a gene
2. **chromosomes** thread-like structures made of DNA, observed in dividing cells
3. **dominant allele** the form of a gene which is expressed in the heterozygous (hybrid) condition, masking the other (recessive) form of the same gene
4. **gene** the smallest physical unit of heredity
5. **genetics** the study of heredity and variation in biological systems
6. **genotype** all the genes present in the cells of an organism
7. **heterozygous** having two different alleles of a particular gene in a diploid cell for any particular hereditary characteristic
8. **homozygous** having identical alleles of a particular gene in a diploid cell for any particular hereditary characteristic
9. **hybrid** the offspring from the cross-breeding of two distinct races, breeds, varieties, species or genera
10. **Mendel's laws** the set of principles derived by Gregor Mendel relating to the transmission of hereditary characteristics from parent organisms to their children
11. **monohybrid** the offspring of individuals that are pure-breeding for different alleles of a particular gene
12. **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
13. **pedigree chart** a universally accepted scientific format to represent the inheritance of a particular genetic trait over a number of generations
14. **phenotype** the detectable physical, chemical or behavioural characteristics or traits of an organism
15. **pure-breeding** homozygous
16. **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
17. **segregate** separate (as in individual chromosomes that segregate from each homologous pair during meiosis)
18. **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