

THE TERMS TO KNOW

- **Allele:**

The alternative form of a gene

- **Artificial selection:**

Selective breeding, intentional breeding between individuals for certain traits or combination of traits

- **Breeds:**

The animals which are bred through artificial selection

- **Chromatin:**

The chemical material that make the structure of the chromosome

- **Co-dominance:**

The situation where two allele of a gene pair express their traits independently instead of showing a dominant-recessive relationship

- **Cultivar:**

The plants which are bred through artificial selection

- **Dihybrid cross:**

A genetic cross in which two pairs of contrasting traits are studied

- **Dominant:**

An allele or a gene that is expressed in an organism's phenotype, masking the effect of the recessive allele or gene when present

- **Genotype:**

The specific combination of genes in an individual may be homozygous or heterozygous

- **Gene:**

Unit of inheritance consists of the length of DNA that contains specific instructions for the synthesis of a protein molecule

- **Heterozygous:**

The genotype that has two different alleles of a trait

- **Histone:**

The protein present in the structure of chromosome

- **Homologous chromosomes:**

A pair of chromosomes having the same size and shape and carrying alleles for the same traits

- **Homozygous:**

Having two identical alleles of a trait

- **Incomplete dominance:**

A type of inheritance in which neither of the pair of contrasting alleles is dominant over the other and the heterozygous individual is intermediate in phenotype

- **Inheritance:**

The transmission of characteristics from parents to offspring

- **Locus:**

Plural Loci, The locations or positions of genes on chromosomes

- **Mutation:**

Change in chromosome or DNA (gene), produces variations in the traits

- **Monohybrid cross:**

A genetic cross in which only one pair of contrasting traits is studied

- **Natural selection:**

The process in which organisms with favorable variations survive and produce more offspring than less well-adapted organisms

- **Nucleosome:**

The structure formed by the wrapping of DNA around histone proteins

- **Organic evolution:**

Biological evolution the modification of characteristics in the species or populations of organisms during their descent, generation by generation

- **Phenotype:**

The expression of the genotype in the form of trait

- **Recessive trait:**

The trait which is masked in the offspring of a cross between two homozygous individuals showing contrasting forms of the trait

- **Trait:**

The characteristics which are controlled and transmitted to next generations through genes

- **True-breeding:**

The homozygous individual

- **Variations:**

A characteristic in an individual that differs from the typical characteristics of other individuals of the same species

