

Chap 14: Mendelian and Nonmendelian Genetics

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What is a true breeding organism?

Know the concepts for P, F₁ and F₂ generations.

Know the difference between monohybrids and dihybrids.

What are alleles? What is a locus?

Be able to differentiate between Law of Segregation and Law of Independent Assortment

Differentiate between Homozygous, Heterozygous and Hemizygous.

Differentiate between Genotype and Phenotype

What is the value of a test cross?

Be able to calculate the probabilities of crosses using Multiplication and Addition rules.

Differentiate between Complete dominance, Incomplete dominance, and Codominance.

What happens in crosses for genes that exhibit pleiotropy (multiple allele) traits? (blood type)

What is epistasis?

How can you determine a trait that is generally polygenic?

Can the environment affect gene expression? (Be able to explain)

How can a pedigree be used to determine genetic conditions?

What is a carrier? What genotype are carriers associated with?

What is Amniocentesis?

What is chorionic villus sampling (CVS)?

How are those two above used in genetic testing?