

chromosomes

thread-like structures made of DNA, observed in dividing cells

chromosome theory of inheritance

the idea that genes, the units of heredity, are carried on chromosomes

co-dominance

an inheritance pattern where both alleles present are expressed in the heterozygote

crossing over

the exchange of DNA as a result of breaking and rejoining between homologous chromosomes during meiosis

fertilisation

the fusion of male and female gametes during reproduction

gamete formation

the process by which diploid cells divide and differentiate to become sex cells with half the chromosome number

genetic recombination

the process by which a strand of genetic material (DNA or RNA) is broken and then rejoined to a different DNA molecule, either naturally or artificially

genetic variation

differences in various traits or features that are genetically determined amongst members of a population

genome

the total genetic material within a cell or an individual

heredity

similarity between parents and offspring as a result of the inheritance of genes, carried on DNA molecules, by offspring from their parents

independent  
assortment

random separation of pairs of chromosomes (or genes) during meiosis, giving different traits an equal opportunity of passing into a gamete

locus

the position that a gene occupies on a chromosome

meiosis

a process of cell division that is considered to be a reduction division because it halves the number of chromosomes in the resulting gametes that it produces

nucleotide

a monomer or subunit of nucleic acids that has a distinct structure made up of sugar, a phosphate and a nitrogenous base

sex chromosomes

chromosomes that play a role in determining the sex (gender) of an individual

---

sex-linked genes

genes for non-sexual traits, physically linked to the sex chromosome and inherited together with the sexual traits

---

sex-linked inheritance

a pattern of inheritance of a non-sexual trait whereby it appears to be gender-linked

---

sexual reproduction

a method of producing offspring that involves the fusion of male and female gametes to form a zygote, containing a combination of genetic material from both parents

---