

thylakoid: a disc-shaped membranous structure inside a chloroplast where the light-dependent reactions of photosynthesis take place using chlorophyll embedded in the membranes

tight junction: a firm seal between two adjacent animal cells created by protein adherence

tissue: a group of similar cells carrying out the same function

tonicity: the amount of solute in a solution

trait: a variation in an inherited characteristic

trans-fat: a form of unsaturated fat with the hydrogen atoms neighboring the double bond across from each other rather than on the same side of the double bond

transcription bubble: the region of locally unwound DNA that allows for transcription of mRNA

transcription: the process of making mRNA from DNA

transfer RNA (tRNA): transfer RNA; an RNA molecule that contains a specific three-nucleotide anticodon sequence to pair with the mRNA codon and also binds to a specific amino acid

translation: process of making a protein from the nucleotide sequence code of an mRNA transcript

translocation: the process by which one segment of a chromosome dissociates and reattaches to a different, nonhomologous chromosome

triglyceride: a fat molecule; consists of three fatty acids linked to a glycerol molecule

trisomy: an otherwise diploid genotype in which one entire chromosome is duplicated

unsaturated fatty acid: a long-chain hydrocarbon that has one or more than one double bonds in the hydrocarbon chain

V

vacuole: a membrane-bound sac, somewhat larger than a vesicle, that functions in cellular storage and transport

valence shell: the outermost electron shell

variants: genotypes or phenotype that deviate from the wild type

variation: the variety of alleles in a population

vesicle: a small, membrane-bound sac that functions in cellular storage and transport; its membrane is capable of fusing with the plasma membrane and the membranes of the endoplasmic reticulum and Golgi apparatus

vestigial structure: a physical structure present in an organism but that has no apparent function and appears to be from a functional structure in a distant ancestor

W

wavelength: the distance between consecutive points of a wave

waxes: a type of lipid made up of a hydrocarbon chain with an alcohol (–OH) group and a fatty acid

wild type: the most commonly occurring genotype or phenotype for a given characteristic found in a population

X

X (sex)-linked: pattern of inheritance in which an allele is carried on the X chromosome of the 23rd pair

X-linked dominant inheritance: pattern of dominant inheritance that corresponds to a gene on the X chromosome of the 23rd pair

X-linked recessive inheritance: pattern of recessive inheritance that corresponds to a gene on the X chromosome of the 23rd pair

Z

zygote: a fertilized egg produced when a sperm and egg fuse

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