

CHAPTERWISE IMPORTANT BIOLOGY TERMINOLOGIES FOR NEET 2023
PREPARATIONS

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BIOLOGY GLOSSARY

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FOR NEET 2023 | CLASS 11 | CLASS 12



BY LEARNING MANTRAS

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Words	Definition
Adaptation	A trait or characteristic that increases an organism's fitness in its environment.
Allele	One of two or more alternative forms of a gene.
Amniotic fluid	The fluid that surrounds and protects a developing embryo or fetus.
Amino acid	The building blocks of proteins.
Amoeba	A single-celled organism that moves and feeds using pseudopodia.
Anaerobic	Processes that occur in the absence of oxygen.
Anatomy	The study of the structure of living organisms.
Angiosperm	A flowering plant that produces seeds enclosed in an ovary.
Animalia	The taxonomic kingdom of multicellular organisms that are heterotrophic and lack cell walls.
Antibiotic	A substance that kills or inhibits the growth of bacteria.
Antibody	A protein produced by the immune system that recognizes and neutralizes foreign substances.
Antigen	A foreign substance that triggers an immune response.
Aorta	The largest artery in the body that carries oxygenated blood away from the heart.
Apoptosis	The programmed cell death that occurs in multicellular organisms.
Archaea	A domain of unicellular organisms that live in extreme environments and have unique biochemical and genetic features.
Artificial selection	The process of selecting and breeding individuals with desired traits for human purposes.
Asymmetry	The lack of symmetry in an organism or body part.
Atom	The basic unit of matter that cannot be broken down into smaller particles by chemical means.
ATP	Adenosine triphosphate, the molecule that carries energy within cells.
Autotroph	An organism that produces its own food through photosynthesis or chemosynthesis.
Axon	The long, slender extension of a neuron that conducts electrical impulses away from the cell body.

Words	Definition
Bacteria	Single-celled prokaryotic organisms that can be found in a variety of environments.
Bacteriophage	A virus that infects bacteria.
Biodiversity	The variety of life forms in a particular ecosystem or on the planet as a whole.
Bioinformatics	The application of computer science and statistics to the study of biological data.
Biome	A large community of plants and animals that occupies a distinct ecological region.
Biotechnology	The use of living organisms or their products to make useful products or solve practical problems.
Blood	The fluid connective tissue that carries nutrients, gases, and waste products throughout the body.
Bone	The hard, mineralized connective tissue that provides support and protection to the body.
Brain	The organ that serves as the center of the nervous system in vertebrates.
Budding	A form of asexual reproduction in which a new individual grows out of the body of the parent organism.
Buffer	A substance that resists changes in pH by absorbing or releasing hydrogen ions.
Butterfly	A flying insect with two pairs of wings and a long, thin body.
Biodiversity hotspot	An area that has a high level of biodiversity and is under threat from human activities.
Biosphere	The region of the Earth and its atmosphere that supports life.
Blastula	A hollow ball of cells that forms early in embryonic development.
Biogeochemical cycle	The cycling of elements through living and nonliving components of ecosystems.
Bioluminescence	The production of light by living organisms.
Blastocyst	The stage of embryonic development at which the embryo forms a hollow ball of cells with an inner cell mass.
Bioenergetics	The study of energy flow through living systems.
Binary fission	A form of asexual reproduction in which a single organism divides into two genetically identical daughter cells.

Words	Definition
Carbon cycle	The process by which carbon is cycled between the atmosphere, oceans, and living organisms.
Carnivore	An animal that feeds on other animals.
Carbohydrate	A biomolecule made up of carbon, hydrogen, and oxygen, and used by living organisms for energy storage and structural support.
Cell	The basic unit of life that carries out all the functions necessary for living organisms.
Cell cycle	The series of events that occur during the life of a cell, including growth, DNA replication, and cell division.
Cell membrane	The selectively permeable membrane that surrounds cells and regulates the movement of materials in and out of the cell.
Cell theory	The scientific theory that all living organisms are composed of cells and that cells are the basic unit of life.
Cellular respiration	The process by which living organisms convert glucose and oxygen into energy, carbon dioxide, and water.
Chlorophyll	The green pigment found in plant cells that absorbs light energy for use in photosynthesis.
Chloroplast	The organelle found in plant cells that carries out photosynthesis.
Chromosome	The structure made of DNA and protein that carries genetic information from one generation to the next.
Cloning	The process of creating genetically identical copies of an organism or cell.
Community	A group of different populations of organisms living in a particular area and interacting with each other.
Competition	The interaction between organisms that use the same resources in the same ecosystem.
Consumer	An organism that feeds on other organisms in a food chain or food web.
Control group	The group in a scientific experiment that does not receive the treatment being tested and is used as a comparison.
Crossing over	The exchange of genetic material between homologous chromosomes during meiosis.
Cytoplasm	The gel-like substance that fills the cell and contains organelles, nutrients, and other molecules.

Cytoskeleton	The network of protein fibers that provides shape and support to cells and facilitates movement.
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Words	Definition
Darwinism	The theory of evolution proposed by Charles Darwin, which suggests that species evolve over time through natural selection.
Decomposer	An organism that breaks down dead organic matter into simpler compounds for use by other organisms.
Deoxyribonucleic acid (DNA)	The molecule that carries genetic information in living organisms.
Denaturation	The process by which a protein loses its three-dimensional shape and function due to changes in temperature, pH, or other environmental factors.
Dentin	The hard, mineralized tissue that makes up most of a tooth.
Diaphragm	The muscle that separates the thoracic cavity from the abdominal cavity and helps with breathing.
Differentiation	The process by which cells become specialized for a particular function during development.
Digestion	The process by which food is broken down into smaller molecules that can be absorbed and used by the body.
Diploid	A cell or organism with two sets of chromosomes (one from each parent).
DNA replication	The process by which a cell makes an exact copy of its DNA before cell division.
Dominant	A trait or allele that is expressed in an organism's phenotype when present in only one copy.
Down syndrome	A genetic disorder caused by the presence of an extra copy of chromosome 21, which results in intellectual disability and other health problems.
Drosophila	The genus of small, fruit-eating flies that are commonly used in genetic studies.
Drug	A substance used to prevent, diagnose, or treat diseases or conditions in living organisms.
Duct	A tube or channel that carries fluids such as sweat, milk, or digestive juices.
Duodenum	The first part of the small intestine where most of the digestion of food occurs.

Words	Definition
Ecosystem	A community of living organisms and their physical environment interacting as a system.
Egg	The female reproductive cell that can fuse with a sperm cell to form a zygote.
Electrophoresis	A laboratory technique used to separate DNA, RNA, or proteins based on their size and charge.
Embryo	The early developmental stage of a multicellular organism that follows fertilization.
Endocrine gland	A gland that secretes hormones directly into the bloodstream.
Endocytosis	The process by which a cell takes in materials from its environment by engulfing them in a membrane-bound vesicle.
Enzyme	A protein that catalyzes chemical reactions in living organisms.
Eukaryote	An organism whose cells contain a nucleus and other membrane-bound organelles.
Evolution	The process by which species change over time through genetic variation, mutation, and natural selection.
Excretion	The process by which metabolic wastes and excess substances are eliminated from the body.
Exocrine gland	A gland that secretes its products through a duct to a surface or cavity of the body.
Exocytosis	The process by which a cell releases materials to its environment by fusing a membrane-bound vesicle with the plasma membrane.
Eye	The organ of sight that detects light and sends visual information to the brain.

Words	Definition
Fatty acid	A molecule consisting of a long chain of carbon atoms with a carboxyl group at one end and a methyl group at the other end.
Fermentation	The process by which microorganisms break down organic compounds in the absence of oxygen to produce energy.
Fetus	The developing organism in the uterus from the ninth week of gestation until birth.
Fibroblast	A type of cell that produces and secretes the extracellular matrix of connective tissue.
Fitness	The ability of an organism to survive and reproduce in a given environment.

Flagella	Long, whip-like structures that extend from the surface of certain cells and are used for movement.
Flora	The microorganisms that live in or on a particular environment, such as the gut flora.
Follicle	A small, fluid-filled sac in the ovary that contains an immature egg.
Food chain	A series of organisms in an ecosystem through which energy and nutrients are passed along by eating and being eaten.
Fossil	The remains or traces of ancient organisms preserved in sedimentary rock.
Frameshift mutation	A mutation that occurs when a single nucleotide is inserted or deleted from a DNA sequence, causing a shift in the reading frame of the gene.
Fructose	A simple sugar that is a major component of fruit and honey.
Fungi	A kingdom of eukaryotic organisms that includes yeasts, molds, and mushrooms.

Words	Definition
Gamete	A reproductive cell that can fuse with another reproductive cell to form a zygote.
Gene	A sequence of DNA that codes for a specific protein or RNA molecule, which determines a particular trait.
Gene expression	The process by which information from a gene is used to synthesize a functional gene product, such as a protein.
Genome	The complete set of genetic material of an organism, including its genes and non-coding DNA.
Genotype	The genetic makeup of an organism, which determines its physical and physiological traits.
Germination	The process by which a plant embryo emerges from a seed and begins to grow into a seedling.
Gluconeogenesis	The process by which the body synthesizes glucose from non-carbohydrate sources, such as amino acids or fatty acids.
Glycolysis	The process by which glucose is broken down into pyruvate to produce ATP, the primary source of energy for cells.
Golgi apparatus	An organelle in eukaryotic cells that modifies, sorts, and packages proteins and lipids for transport to other parts of the cell or for secretion.

Gravitropism	The growth response of plants to gravity, which allows them to grow in the correct orientation.
Greenhouse effect	The warming of the Earth's surface and atmosphere due to the trapping of heat by greenhouse gases, such as carbon dioxide and water vapor.
Gymnosperm	A type of seed plant that does not produce flowers or fruits, and instead has its seeds exposed on the surface of cones or scales.
Growth hormone	A hormone that stimulates cell growth, reproduction, and regeneration in humans and other animals.

Words	Definition
Habitat	The natural environment where an organism lives and obtains the resources it needs to survive.
Haploid	A cell or organism that has one set of chromosomes, as opposed to diploid, which has two sets.
Hardy-Weinberg equilibrium	A mathematical model that describes the relationship between allele and genotype frequencies in a population that is not evolving.
Heart	A muscular organ that pumps blood throughout the body in vertebrates.
Hemoglobin	A protein in red blood cells that binds to oxygen and carries it from the lungs to the body's tissues.
Herbivore	An animal that feeds primarily on plants.
Heterozygous	A genotype in which an individual has two different alleles for a particular gene.
Histone	A protein that helps package DNA into a compact structure called chromatin in eukaryotic cells.
Homeostasis	The ability of an organism to maintain a stable internal environment despite changes in the external environment.
Homologous chromosomes	A pair of chromosomes that carry the same genes in the same order, one from each parent.
Hormone	A chemical messenger produced by endocrine glands that regulates various physiological processes in the body.
Human Genome Project	An international scientific effort to sequence and map all the genes in the human genome.

Hybridization	The process of crossing two different species or varieties to produce offspring with traits of both parents.
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Words	Definition
Immune system	A complex network of cells, tissues, and organs that protects the body from pathogens and foreign substances.
Inbreeding	The mating of closely related individuals within a population, which can increase the frequency of homozygous genotypes and decrease genetic diversity.
Incomplete dominance	A pattern of inheritance in which the heterozygous phenotype is intermediate between the two homozygous phenotypes.
Independent assortment	The principle that alleles of different genes segregate independently of each other during meiosis, leading to new combinations of alleles in gametes.
Induced pluripotent stem cells (iPSCs)	Stem cells that are generated by reprogramming adult cells to a pluripotent state, allowing them to differentiate into different cell types.
Insectivore	An animal that feeds primarily on insects.
Insulin	A hormone produced by the pancreas that regulates blood sugar levels by promoting the uptake of glucose by cells and the storage of glucose as glycogen.
Interphase	The phase of the cell cycle between cell divisions, during which the cell grows, replicates its DNA, and prepares for cell division.
Invasive species	A species that is not native to an ecosystem and has the potential to cause harm to the environment, economy, or human health.
Ionic bond	A type of chemical bond in which two atoms are held together by the attraction between a positively charged ion and a negatively charged ion.
Isotope	A variant of an element that has a different number of neutrons in the nucleus, leading to different atomic masses.

Words	Definition
Joints	The point where two or more bones meet, allowing movement and flexibility in the skeletal system.
Juvenile hormone	A hormone produced by insects that regulates metamorphosis and development from the larval to adult stage.

Jacob-Monod model	A model of gene regulation proposed by Francois Jacob and Jacques Monod in 1961, which describes the regulatory mechanisms of the lac operon in E. coli bacteria.
Juxtamedullary nephrons	A type of nephron in the kidney that has a long loop of Henle that extends deep into the renal medulla, allowing for the production of concentrated urine.
Junctional complexes	Specialized structures between cells that help to form tight and adherent junctions, facilitating communication and adhesion between cells.

Words	Definition
Keratin	A fibrous protein that forms the main structural component of hair, nails, and the outer layer of skin in animals.
Krebs cycle	A series of chemical reactions that occur in the mitochondria of eukaryotic cells, producing energy in the form of ATP molecules.
Karyotype	The number and visual appearance of the chromosomes in the nucleus of a eukaryotic cell, used to diagnose chromosomal disorders.
Kinase	An enzyme that catalyzes the transfer of a phosphate group from ATP to a specific target molecule, often regulating cellular signaling pathways and metabolic processes.
Knockout mouse	A genetically engineered mouse in which one or more genes have been deleted or disrupted, used to study the function of specific genes in vivo.

Words	Definition
Lactic acid	An organic acid produced by the breakdown of glucose in anaerobic respiration, leading to muscle fatigue and soreness.
Lactose	A disaccharide sugar found in milk, composed of glucose and galactose units.
Lagging strand	The DNA strand synthesized discontinuously during DNA replication, in the opposite direction of the replication fork.
Lamarckism	A theory of evolution proposed by Jean-Baptiste Lamarck in the 19th century, which suggests that organisms can pass on acquired traits to their offspring.
Lateral meristem	A type of plant tissue that produces growth in diameter or girth, known as secondary growth.
Law of independent assortment`	One of Mendel's laws of inheritance, which states that the inheritance of one trait is independent of the inheritance of another trait.

Law of segregation	One of Mendel's laws of inheritance, which states that alleles of a gene separate from each other during gamete formation, leading to the inheritance of one allele from each parent.
Lecithin	A phospholipid found in cell membranes that acts as an emulsifier in the digestion of fats.
Leucoplast	A type of plastid in plant cells that stores starch and oils.
Lignin	A complex polymer found in the cell walls of woody plants that provides structural support and rigidity.
Lipase	An enzyme that breaks down fats and lipids into smaller molecules, such as fatty acids and glycerol.
Lysosome	A membrane-bound organelle in animal cells that contains digestive enzymes and breaks down cellular waste and debris.

Words	Definition
mRNA	Messenger RNA is a type of RNA molecule that carries genetic information from the DNA to the ribosome for protein synthesis.
Macromolecule	A large molecule such as a protein, nucleic acid, or carbohydrate, typically composed of smaller subunits.
Meiosis	A type of cell division that produces four genetically diverse haploid daughter cells from one diploid parent cell.
Mendelian inheritance	The principles of inheritance first described by Gregor Mendel, which include the law of segregation and the law of independent assortment.
Microevolution	Small-scale evolutionary changes that occur within a population over time, such as changes in allele frequencies.
Mitochondria	Membrane-bound organelles found in eukaryotic cells that generate energy in the form of ATP through cellular respiration.
Mitosis	A type of cell division that produces two genetically identical daughter cells from one parent cell.
Mutation	A change in the DNA sequence of a gene or chromosome, which can result in altered gene expression or a genetic disorder.
Myelin sheath	A fatty layer that surrounds and insulates axons in the nervous system, enabling fast and efficient transmission of nerve impulses.
Mycorrhiza	A mutualistic association between a fungus and the roots of a plant, in which the fungus provides nutrients to the plant in exchange for carbohydrates.

Words	Definition
Natural selection	The process by which certain heritable traits become more or less common in a population over time due to differential reproductive success.
Nephron	The functional unit of the kidney responsible for filtering blood and producing urine.
Nerve impulse	The transmission of electrical signals along the axons of neurons, which enables communication within the nervous system.
Neurotransmitter	A chemical messenger that transmits signals between neurons or between neurons and target cells.
Nitrogen cycle	The biogeochemical cycle by which nitrogen is converted into various forms and cycled through the atmosphere, soil, and organisms.
Non-coding DNA	DNA sequences that do not code for proteins but may have other regulatory or functional roles in the genome.
Nucleic acid	A large biomolecule composed of nucleotides, including DNA and RNA, which encode genetic information and play critical roles in cellular processes.
Nucleus	A membrane-bound organelle found in eukaryotic cells that contains the cell's genetic material (DNA).
Nutrient cycle	The biogeochemical cycles by which nutrients such as carbon, nitrogen, and phosphorus are cycled through ecosystems via biotic and abiotic processes.
Nucleotide	The building block of nucleic acids, consisting of a nitrogenous base, a sugar, and a phosphate group.

Words	Definition
Oogenesis	The process of egg cell (oocyte) formation in the ovaries of female animals.
Oncogene	A mutated or overexpressed gene that can promote the development of cancer by driving uncontrolled cell growth and division.
Oncology	The study and treatment of cancer.
Operon	A functional unit of DNA in prokaryotes that includes a cluster of genes under the control of a single promoter and operator.
Osmosis	The movement of water molecules from an area of high concentration to an area of low concentration across a semi-permeable membrane.
Ovary	The female reproductive organ that produces and releases eggs (ova) and secretes hormones such as estrogen and progesterone.

Oxidation	A chemical reaction in which an atom or molecule loses electrons, resulting in an increase in its oxidation state.
Oxidative phosphorylation	The process by which ATP is synthesized in the mitochondria via the electron transport chain and chemiosmosis.
Organic molecule	A molecule that contains carbon atoms covalently bonded to other atoms, such as hydrogen, oxygen, nitrogen, or sulfur.
Osteoblast	A bone-forming cell involved in the growth and repair of bone tissue.

Words	Definition
Parasite	An organism that lives on or in another organism (host) and benefits by deriving nutrients or other resources from it.
Pedigree	A diagram that shows the genetic relationships among family members for a particular trait or disorder.
Peptide bond	The covalent bond that forms between the carboxyl group of one amino acid and the amino group of another amino acid during protein synthesis.
Photosynthesis	The process by which green plants and other organisms convert light energy into chemical energy in the form of organic compounds (e.g. glucose).
Phylogeny	The evolutionary history and relationship of a group of organisms, often represented as a tree diagram called a phylogenetic tree.
Pituitary gland	A small gland located at the base of the brain that produces and secretes hormones that regulate various bodily functions, including growth, metabolism, and reproduction.
Plasmid	A small, circular DNA molecule that can replicate independently of the chromosomal DNA and can be transferred between bacteria through conjugation.
Polymerase chain reaction (PCR)	A laboratory technique used to amplify a specific DNA sequence by repeatedly heating and cooling the reaction mixture to denature and anneal DNA strands, respectively.
Polymorphism	The occurrence of two or more forms or variants of a gene or DNA sequence in a population, often resulting in different traits or phenotypes.
Prokaryote	A type of cell that lacks a nucleus and other membrane-bound organelles, found in bacteria and archaea.

Words	Definition
Qualitative data	Data that is descriptive and non-numerical, such as observations or characteristics of a sample.
Quantitative data	Data that is numerical and measurable, such as measurements or counts of a sample.
Quorum sensing	The ability of bacteria to communicate and coordinate their behavior through the production and detection of signaling molecules called autoinducers.
Quadrat	A sampling tool used to estimate the abundance or distribution of organisms in a particular habitat, typically a square frame divided into smaller squares or rectangles.
Quickening	The first noticeable movements of a fetus in the uterus, typically felt by the mother between 16 and 25 weeks of pregnancy.

Words	Definition
Ribosome	A cellular organelle responsible for protein synthesis, made up of RNA and protein molecules.
Restriction enzyme	An enzyme that cuts DNA at specific recognition sequences, used in molecular biology for genetic engineering and DNA analysis.
RNA	Ribonucleic acid, a type of nucleic acid involved in protein synthesis and gene regulation, among other functions.
Replication	The process of copying DNA to produce two identical daughter strands.
Respiration	The process by which cells obtain energy from nutrients, typically through aerobic or anaerobic processes that involve the oxidation of molecules like glucose.
Reflex arc	The neural pathway that allows for a rapid, automatic response to a stimulus, involving sensory neurons, interneurons, and motor neurons.
Rhizosphere	The zone of soil surrounding plant roots that is influenced by the plant and its associated microorganisms.
Rumen	The largest chamber of the stomach in ruminant animals like cows, where microbial fermentation of food occurs.
Receptor	A specialized protein molecule that binds to specific molecules, such as hormones or neurotransmitters, and transmits signals within cells or between cells.
Recombinant DNA	DNA molecules that have been artificially modified through genetic engineering, typically by combining DNA from different sources.

Words	Definition
Selective permeability	The property of a membrane that allows only certain substances to pass through, while blocking others based on size, charge, or other characteristics.
Somatic cell	Any cell in the body that is not a gamete (reproductive cell), including skin cells, muscle cells, and nerve cells.
Synapse	The junction between two neurons or between a neuron and a target cell, where communication occurs through the release and detection of neurotransmitters.
Stem cell	A type of unspecialized cell that has the ability to divide and differentiate into different cell types, often used in regenerative medicine and tissue engineering.
Sexual reproduction	A type of reproduction that involves the fusion of gametes from two parents to produce offspring with genetic variation.
Spliceosome	A complex of RNA and protein molecules that removes introns (non-coding regions) from pre-mRNA during splicing, resulting in the production of mature mRNA.
Stroma	The supportive tissue or matrix of an organ or structure, often used to refer to the chloroplast matrix in plant cells.
Signal transduction	The process by which a cell converts an extracellular signal (such as a hormone or neurotransmitter) into a specific intracellular response, typically involving a cascade of protein signaling molecules.
Substrate	The molecule or substance upon which an enzyme acts to catalyze a chemical reaction.
Species	A group of living organisms that share similar characteristics and can interbreed to produce viable offspring.

Words	Definition
Taxonomy	The branch of biology concerned with the identification, classification, and naming of organisms based on their physical and genetic characteristics.
Transcription	The process by which RNA is synthesized from a DNA template, resulting in the production of messenger RNA (mRNA), transfer RNA (tRNA), or ribosomal RNA (rRNA).
Translation	The process by which the genetic code in mRNA is used to synthesize a protein, involving the assembly of amino acids into a polypeptide chain.
Thylakoid	A membrane-bound compartment within the chloroplast that is the site of light-dependent reactions in photosynthesis.
Trophic level	The position of an organism in a food chain or food web, determined by its source of energy and nutrient acquisition.

Transpiration	The process by which water is lost from plant leaves through small pores called stomata, driven by a combination of factors including temperature, humidity, and plant physiology.
Tissue	A group of cells with similar structure and function, often organized into larger structures called organs.
Telomere	The repetitive DNA sequence at the ends of chromosomes that protects against loss of genetic information during cell division.
Thermoregulation	The process by which organisms maintain a stable internal body temperature, often through behavioral or physiological adaptations.
Turgor pressure	The pressure exerted by water inside plant cells against the cell wall, which helps maintain the structural integrity of the cell and contributes to plant growth and rigidity.

Words	Definition
Ubiquitin	A small regulatory protein that is found in almost all eukaryotic cells, and is involved in the degradation of proteins by the proteasome.
Ultrastructure	The detailed structure of biological specimens at a very fine scale, typically observed using high-powered microscopy techniques.
Urea cycle	A biochemical pathway in which nitrogenous waste is converted to urea and excreted by the kidneys, a process essential for nitrogen balance in mammals.
Uracil	One of the four nucleotide bases found in RNA, replacing thymine found in DNA.
Unicellular	An organism consisting of only one cell, as opposed to multicellular organisms.
Unit membrane	The structure of biological membranes, consisting of a lipid bilayer with embedded proteins and other components.
Upregulation	The increase in expression or activity of a gene, protein, or other biological component in response to a stimulus or change in environment.
Urinary system	The organ system responsible for the production, storage, and excretion of urine, including the kidneys, bladder, and urethra.
Ultrafiltration	A process used in the kidney to filter small molecules from the blood, including waste products and excess water, before it is excreted as urine.
Uniparental inheritance	Inheritance of genetic material from only one parent, as is the case with mitochondrial DNA, which is inherited only from the mother.

Words	Definition
Vacuole	A membrane-bound organelle found in plant and fungal cells that stores water, nutrients, and other substances.
Variation	The differences that exist between individuals within a population, arising from genetic, environmental, or a combination of both factors.
Vector	An organism that carries and transmits disease-causing pathogens from one host to another.
Ventilation	The process of moving air in and out of the lungs, essential for gas exchange and respiration.
Vesicle	A small membrane-bound sac that transports materials within a cell or between cells.
Virology	The study of viruses, their structure, replication, and interactions with host cells.
Virulence	The ability of a pathogen to cause disease in a host organism.
Virus	An infectious agent that consists of a nucleic acid core (DNA or RNA) surrounded by a protein coat, and sometimes an envelope, that can only replicate inside living host cells.
Vital capacity	The maximum amount of air that can be exhaled from the lungs after a maximum inhalation, a measure of lung function.
Vitamins	Essential organic compounds that are required in small amounts for various physiological functions, and which cannot be synthesized by the body.

Words	Definition
Water potential	A measure of the potential energy of water in a system, which is influenced by solute concentration, pressure, and gravity.
Watson-Crick model	The double helix model of DNA proposed by James Watson and Francis Crick in 1953, which explained how the genetic information is stored and replicated in DNA.
Wetland	A type of ecosystem characterized by waterlogged soil, hydrophytic vegetation, and high biological productivity.
White blood cells	Blood cells that play a role in the immune system's defense against pathogens and foreign substances, including lymphocytes, monocytes, neutrophils, eosinophils, and basophils.
Wild type	The typical or normal form of a gene, phenotype, or organism that is most commonly found in a population.
Xylem	The specialized tissue in plants that transports water and dissolved minerals from the roots to the leaves, stems, and flowers.

Words	Definition
Yeast	a single-celled organism that is commonly used in baking and brewing
Yolk	the nutrient-rich substance in an egg that provides nourishment to the developing embryo
Y-linked inheritance	a type of genetic inheritance that is determined by genes located on the Y chromosome
Yersinia	a genus of bacteria that includes species that can cause diseases such as plague and food poisoning
Yellow bone marrow	A type of bone marrow that stores fat and serves as an energy reserve, found in the medullary cavity of long bones.

Words	Definition
Zona pellucida	a glycoprotein layer that surrounds the mammalian oocyte and serves as a barrier to fertilization
Zygote	A diploid cell formed by the fusion of two haploid gametes during fertilization, which develops into a new individual by mitotic division.
Zymogen	an inactive precursor of an enzyme that requires a biochemical change to become active
Zooplankton	small animals that live in aquatic environments and are an important part of the food chain for many aquatic organisms.

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