

gen- birth, beget, race, kind

**Genesis:** The origin or mode of formation of something

**Generate:** To produce or create something

**Allergen:** A substance that can cause an allergic reaction in sensitive individuals

**Angiogenesis:** The process through which new blood vessels form from pre-existing vessels

**Carcinogen:** Any substance or agent that is known to cause cancer in living tissue

**Eugene:** Typically a name; meaning "well-born" or "noble."

**Genotype:** The genetic constitution of an individual organism

**Hallucinogen:** A substance that causes hallucinations

**Iatrogenic:** A term referring to a complication that arises as a result of medical treatment

**Ketogenic:** Relating to a something (like a diet) that produces ketones.

**Orogeny:** The process of mountain formation

**Pyrogen:** Any substance that induces fever or an increase in body temperature

mut- change

**Mutate:** To undergo a change in form or nature; in genetics, it refers to a change in the DNA sequence

**Immutable:** Unchanging over time or unable to be changed

**Mutation:** A change in the DNA sequence that can lead to variations in traits

**Mutagen:** An agent, such as a chemical or radiation, that causes mutations in the DNA of organisms.

**Mutant:** An organism or cell that has undergone a mutation

**Mutilate:** To inflict severe damage or injury on something

**Permutation:** An arrangement or rearrangement of elements in a particular order

**Commutation:** The act of exchanging or substituting one thing for another

script- write

**Transcription:** The process of converting spoken language into written text

**Scripture:** Sacred writings

**Description:** A spoken or written account that provides details about someone or something

**Manuscript:** A handwritten or typed document

**Prescription:** A written order from a qualified healthcare provider for a specific medication

**Postscript:** An additional remark or information added after the main content of a letter or document

**Superscript:** A character or symbol that is written or printed above the line of text

**Subscript:** A character or symbol written or printed below the line of text

**Unscripted:** Not written or prepared in advance

all- other

**Allele:** A variant form of a gene that arises by mutation

**Alloantibody:** An antibody produced in response to an alloantigen, which is an antigen that differs between individuals of the same species, often relevant in blood transfusions and organ transplants.

**Allochthonous:** Referring to something that originate in a different location than where it is currently

**Allograft:** A transplant from a donor of the same species but genetically different from the recipient

**Allomorphism:** The existence of different forms or morphs of a substance

**Allosteric:** Relating to the regulation of an enzyme or protein by the binding of an effector molecule at a site other than the enzyme's active site, which can change its activity.

soma- body

**Somatic:** Relating to the body

**Chromosome:** A thread-like structure made of DNA and protein that carries genetic information

**Autosomal:** Referring to chromosomes that are not sex chromosomes

**Macrosomia:** a condition where a newborn is significantly larger than average

**Lysosome:** A membrane-bound organelle found in eukaryotic cells that contains digestive enzymes

**Trisomy:** A genetic condition characterized by the presence of an extra chromosome in a set; for example, trisomy 21, also known as Down syndrome, occurs when there are three copies of chromosome 21.

dem- people

**Demographic:** Relating to the statistical characteristics of a population

**Demagogue:** A political leader who seeks support by appealing to popular desires and prejudices rather than using rational argument; often manipulates emotions to gain power.

**Democracy:** A system of government in which power is given to the people

germ- grow, sprout

**Germinate:** To begin to grow or develop

**Germinal:** Relating to the earliest stage of development

hom- same

**Homonym:** A word pronounced or spelled the same as another word but has a different meaning

**Homophone:** A word that sounds the same as another word but has a different meaning and often a different spelling. For example, "pair" (a set of two) and "pear" (the fruit).

**Homonuclear:** Referring to molecules that consist of two or more atoms of the same element, such as O<sub>2</sub> (oxygen) or N<sub>2</sub> (nitrogen).

**Homozygous:** A genetic term describing an organism that has two identical alleles for a particular gene, one inherited from each parent; this can affect the expression of traits.

heter- different, other

**Heterotopic:** Referring to tissues or organs that are located in an abnormal position within the body

**Heterocyclic:** Referring to a type of chemical compound that contains a ring structure with at least one atom that is not carbon (such as nitrogen, oxygen, or sulfur)

**Heteronuclear:** Pertaining to molecules that consist of different types of atoms

**Heteronym:** A word that is spelled the same as another word but has a different meaning and usually a different pronunciation. For example, "lead" (to guide) and "lead" (a type of metal).

**Heterophil:** An organism or cell that exhibits a preference for different forms or types; often used in biological contexts to describe species that thrive in diverse environments.

**Heterozygous:** A genetic term describing an organism that has two different alleles for a specific gene, one inherited from each parent; this can lead to variations in traits.

meta- above, beyond, among

**Metonym:** A figure of speech in which one word or phrase is substituted for another with which it is closely associated; for example, using "the White House" to refer to the U.S. presidency or administration.

**Metabolism:** The set of life-sustaining chemical reactions in organisms that convert food into energy, allowing for growth, reproduction, and maintenance of cellular processes; it encompasses both anabolism (building up) and catabolism (breaking down).

**Metacarpal:** Referring to the five bones in the hand that are located between the wrist (carpals) and the fingers (phalanges)

**Metaphor:** A figure of speech that involves an implied comparison between two unlike things

**Metatarsal:** Referring to the five long bones in the foot located between the ankle (tarsals) and the toes (phalanges)