

BIOLOGICAL TERMS

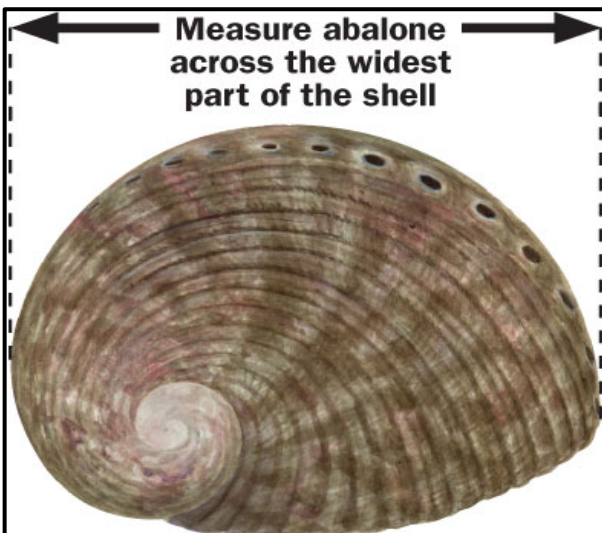
A

Aardvark a nocturnal badger-sized burrowing mammal of Africa, with long ears, a tubular snout, and a long extensible tongue, feeding on ants and termites.



http://vignette4.wikia.nocookie.net/lionking/images/5/51/Aardvark_Walking.png/revision/latest?cb=20140503145331

Abalone (Ear-shell shaped) It is any of various herbivorous large edible marine gastropods of the genus *Haliotis* having an ear-shaped shell with pearly interior. *Haliotis*, common name abalone (US) or ormer (UK), is the only genus in the family Haliotidae. This genus contains 6 subgenera; these subgenera have become alternate representations of *Haliotis*. The number of species recognized worldwide ranges between 30 and 130 with over 230 species-level taxa described. The most comprehensive treatment of the family considers 56 species valid, with 18 additional subspecies.



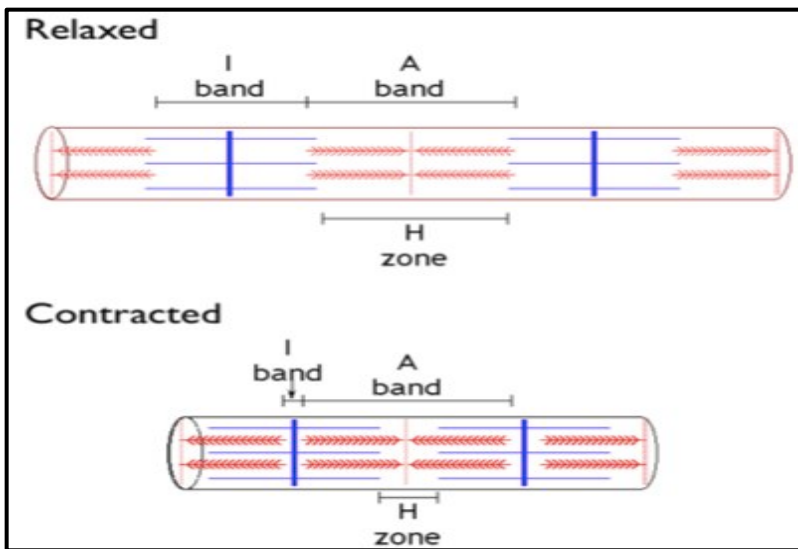
http://www.fish.wa.gov.au/PublishingImages/Maps%20and%20graphs/abalone_measure.jpg



Living abalone in tank showing epipodium and tentacles, anterior end to the right.

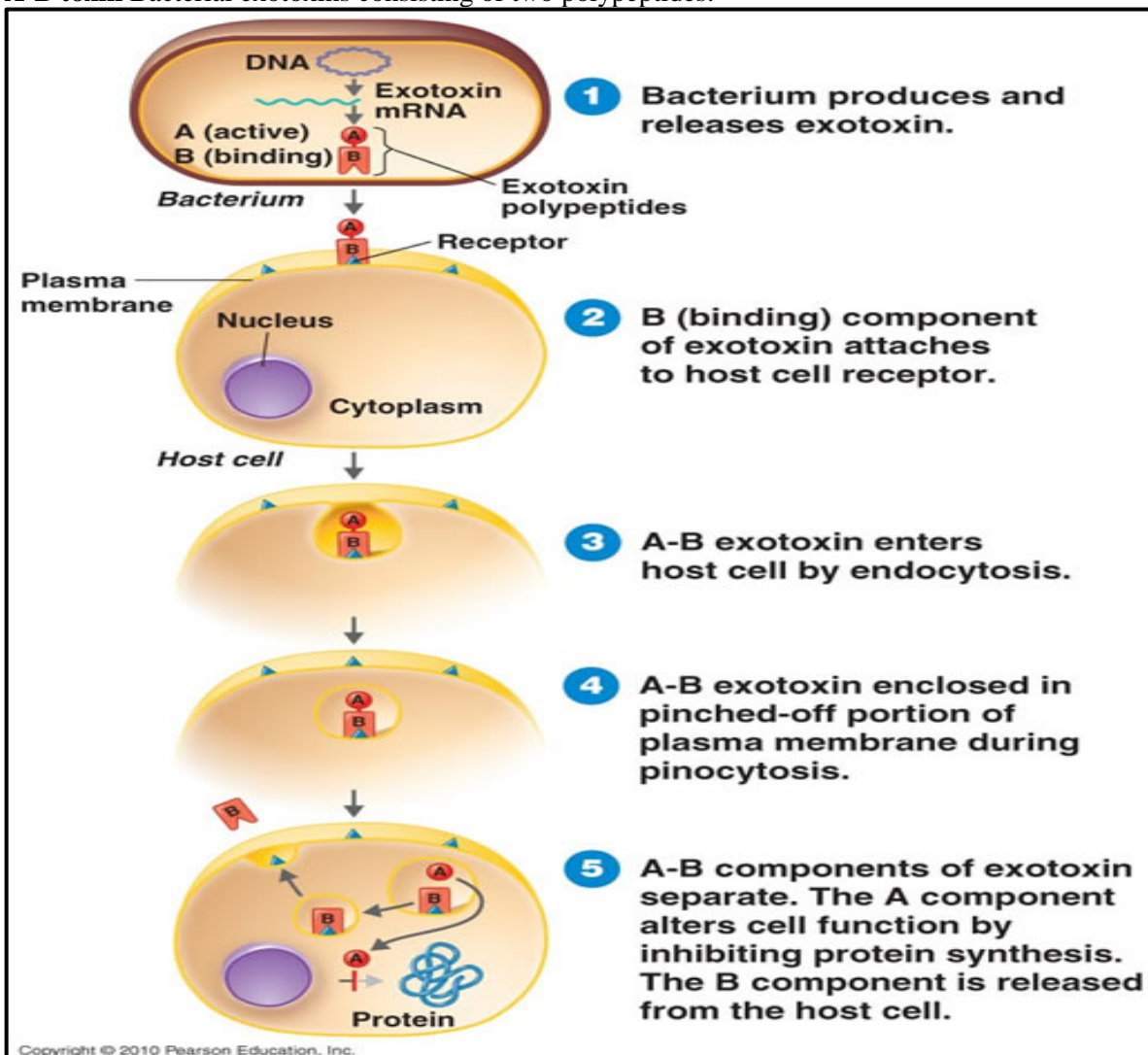
<https://upload.wikimedia.org/wikipedia/commons/thumb/3/33/LivingAbalone.JPG/220px-LivingAbalone.JPG>

A-band The bundle of thick (myosin) and thin (actin) filaments running lengthwise within the sarcomere of body wall muscles, best viewed by polarized light, or by phalloidin or antibody staining. Runs in parallel with I bands to form a series of alternating bright and dark bands. The A band is brighter by polarized light, with a thin darker central stripe, the H zone; the A band contains interdigitating thick and thin filaments. (See H zone, I band, and M line).



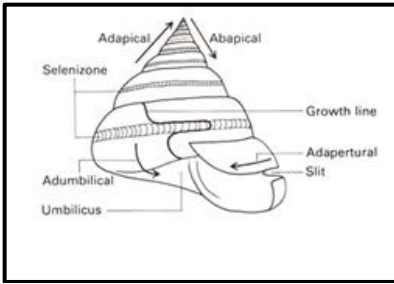
<http://scienceblogs.com/pharyngula/wp-content/blogs.dir/470/files/2012/04/i-11c956a44032f09e577603a2d94194ff-slidingfilament.jpeg>

A-B toxin Bacterial exotoxins consisting of two polypeptides.



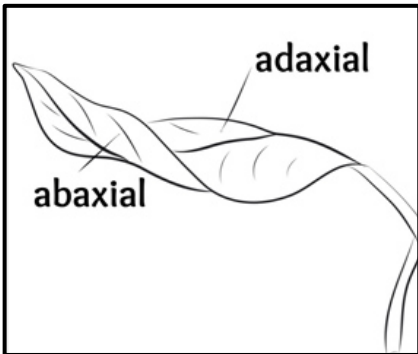
http://classes.midlandstech.edu/carterp/Courses/bio225/chap15/FIGURE_15_05_LABELED.jpg

Abapical Away from the shell apex toward the base or anterior end of a spiral-helico coiled univalve.



<http://www.mcz.harvard.edu/Departments/InvertPaleo/Trenton/Intro/PaleoPage/Terminology&Morphology/Images/Gastropoddiagram.jpg>

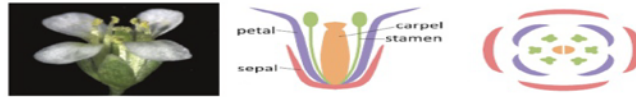
Abaxial means being located on the side away from the axis. The abaxial surface of a leaf is its underside.



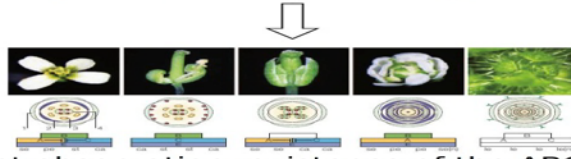
<http://www.wonderweirded-wildlife.com/images/wonderweirded-botany-study-cards-abaxial.jpg>

ABC model A model to explain the genetic control of floral organ determination during flower development. It proposes that the four principal organs – sepals, petals, stamens, and carpels – are specified by genes belonging to three classes: A, B, and C. The organs are arranged in four concentric whorls, and their identity is determined according to which combinations of genes are expressed in each whorl. Class A genes alone specify the outermost whorl of sepals; the formation of petals depends on activation of both class A and B genes; stamens are specified by class B and C genes acting together; and the innermost whorl of carpels is determined by class C genes alone. The model was based on observations of mutant flowers in the thalecress (*Arabidopsis thaliana*). Mutations in these genes cause the transformation of one flower organ into another (i.e. homeosis); for example, a class B mutation causes sepals to develop instead of petals, and carpels instead of stamens.

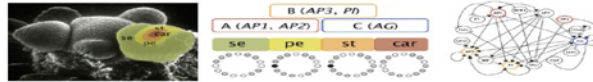
Flower development



1. Morphogenesis observations: Presence of sepals, petals, stamens and carpels

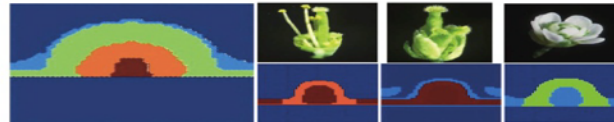


2. Mutant observation: existence of the ABC system



3. Gene expressions and interactions: creation of a GRN

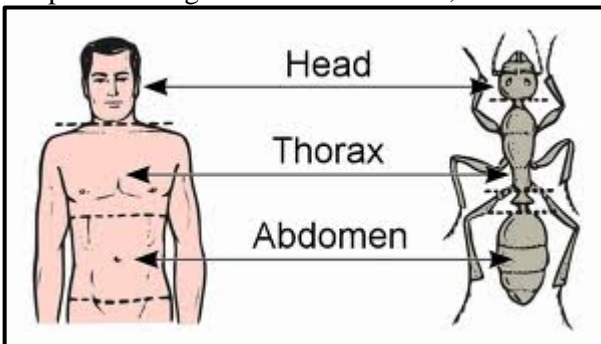
4. Computing models with discrete and continuous equations



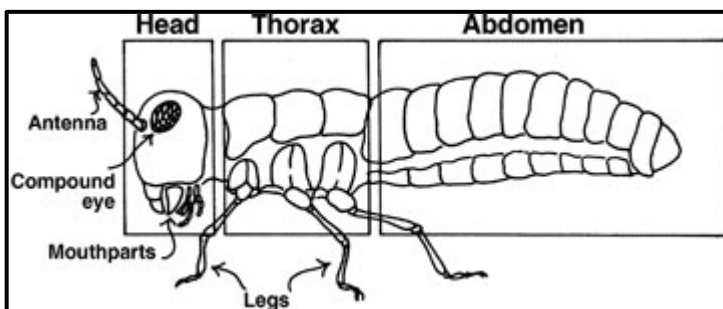
5. Pattern formation that correspond to observations

<http://biologie.ens-lyon.fr/ressources/bibliographies/m1-11-12-biosci-reviews-collaudin-s-1c-m.xml/Pictures/m1-11-12-biosci-reviews-collaudin-s-1c-fig4.jpg>

Abdomen The region of the body (vertebrates) in between the thorax and the pelvis, where stomach, intestines, liver, spleen, and pancreas are contained inside a cavity lined by peritoneum. The posterior segment of invertebrates, after the thoracic segment

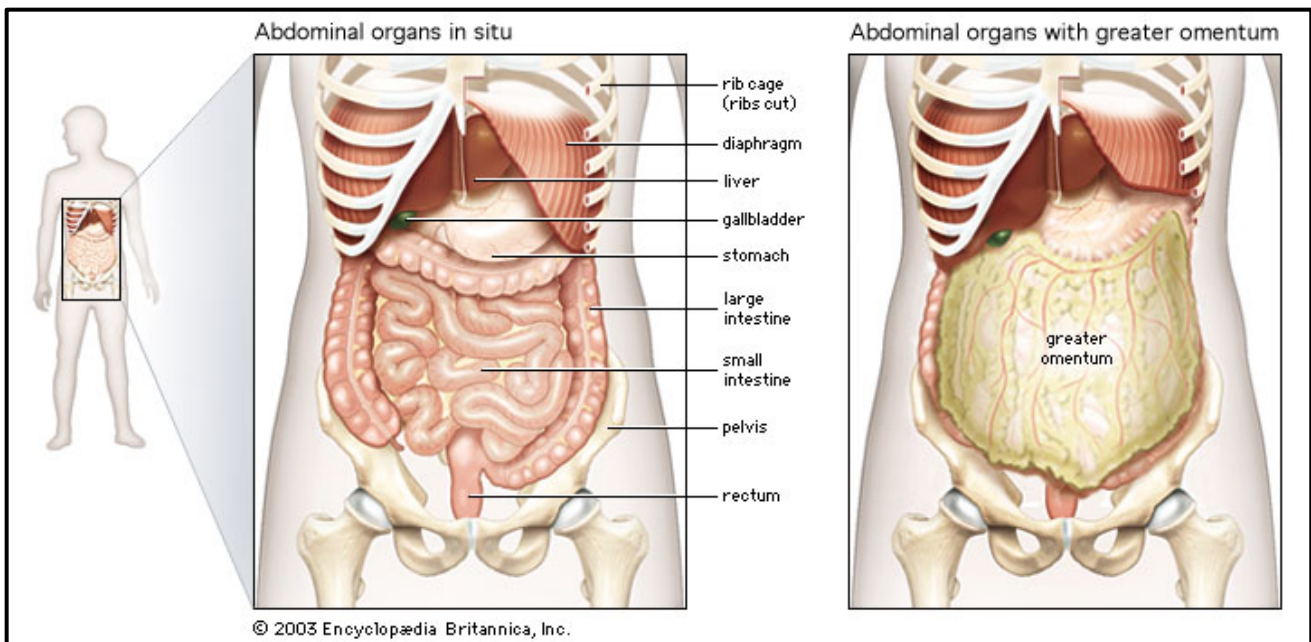


<https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQaNix1sITazzK6U2q5XQ9OCTr79M3j-MGbetSgj5CSK8dIT-a8>



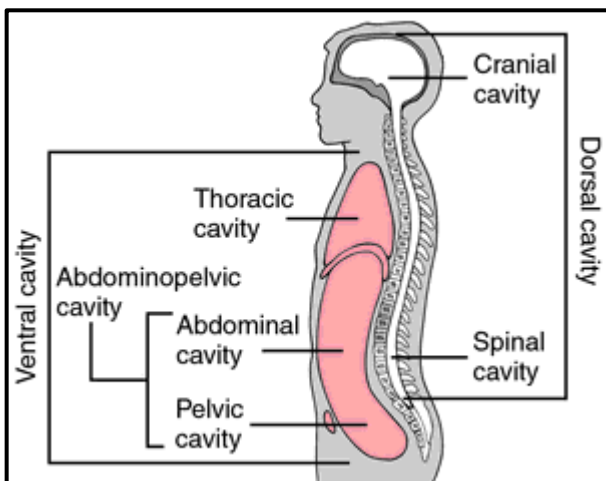
<http://extension.missouri.edu/explore/images/mg0012art01.jpg>

Abdominal cavity the part of the body between the bottom of the ribs and the top of the thighs, containing most of the digestive and urinary systems along with some reproductive organs.



<http://image.tutorvista.com/content/feed/u544/74314-004-32A59CEC.jpg>

Abdominopelvic cavity It is a body cavity that consists of the abdominal cavity and the pelvic cavity. It contains the stomach, liver, pancreas, spleen, gallbladder, kidneys, and most of the small and large intestines. It also contains the urinary bladder and internal reproductive organs.



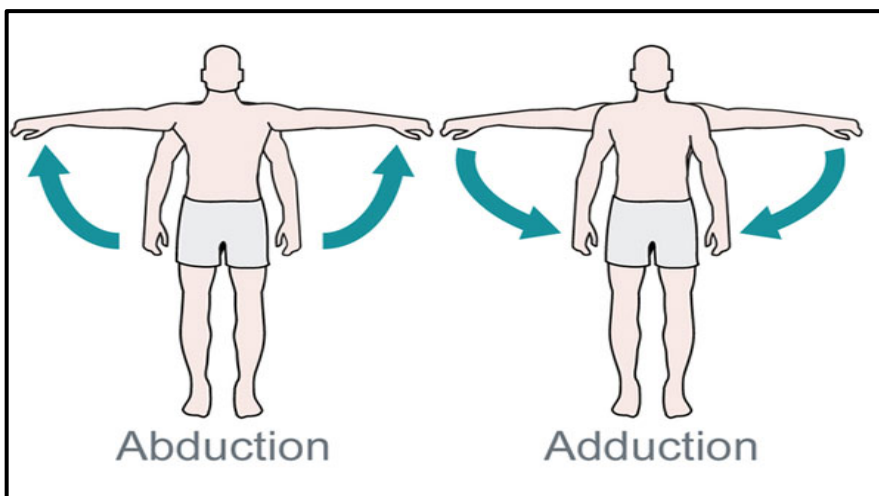
<http://img.tfd.com/mk/C/X2604-C-23A.png>

Abductin is a natural elastic protein that is found in the hinge ligament of bivalve mollusks. It is unique as it is the only protein in nature with compressible elasticity. It is similar to elastin and resilin, but amino acid analysis reveals that it has high concentrations of glycine and methionine. Abductin is made up of three prominent amino acids, glycine, methionine, and phenylalanine, which are arranged in a repeating pentapeptide sequence throughout the molecule. Abductin is found in the hinge ligament of bivalves such as *Argopecten irradians* and *Placopecten magellanicus*.



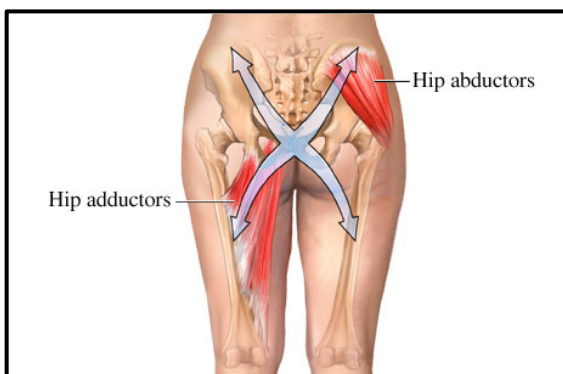
https://upload.wikimedia.org/wikipedia/commons/thumb/8/8a/Hyriidae_-_Mycetopodidae.jpg/220px-Hyriidae_-_Mycetopodidae.jpg

Abduction The movement of a body part away from the axis or midline of the body; movement of a digit away from the axis of the limb.



<http://machinedesign.com/site-files/machinedesign.com/files/uploads/2014/07/What%E2%80%99s-the-diff-Abd-AddWEB.jpg>

Abductor (levator) A type of muscle whose function is to move a limb away from the body. Abductors work antagonistically with adductors.

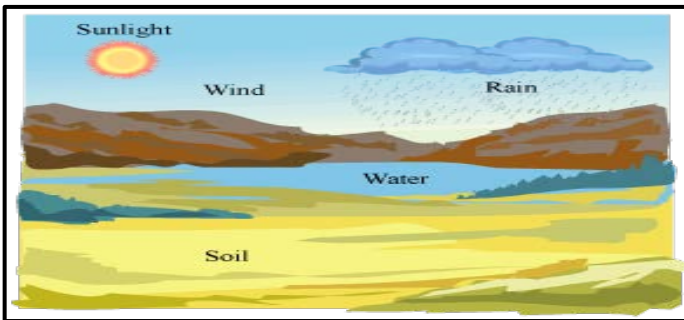


<http://showupfitness.com/wp-content/uploads/2011/12/nr55551971.jpg>

Abiogenesis Early theory that held that some organisms originated from nonliving material. (Compare biogenesis).

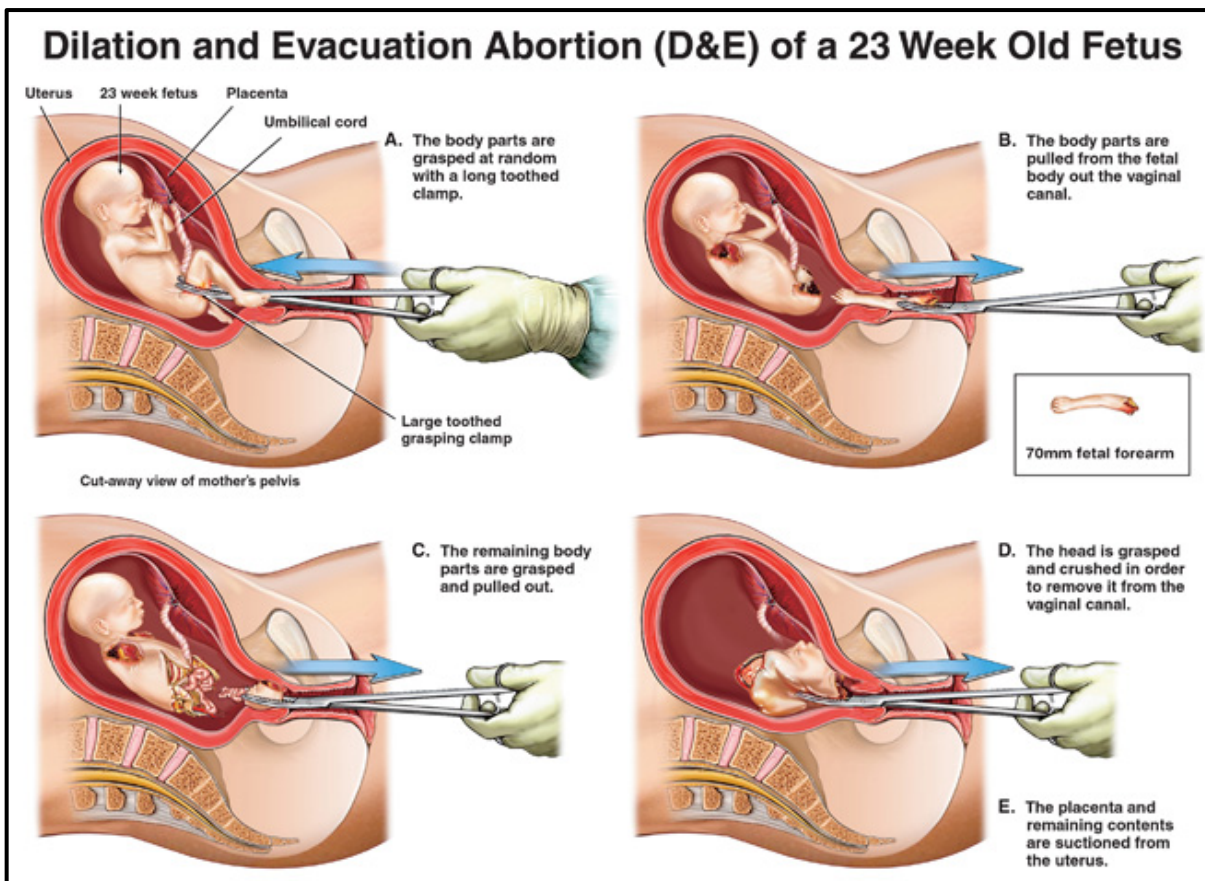
Abiotic Characterized by the absence of life.

Abiotic factors they are the nonliving condition, as climate, sunlight, wind, rain, water, soil, or habitat, that influences or affects an ecosystem and the organisms in it.



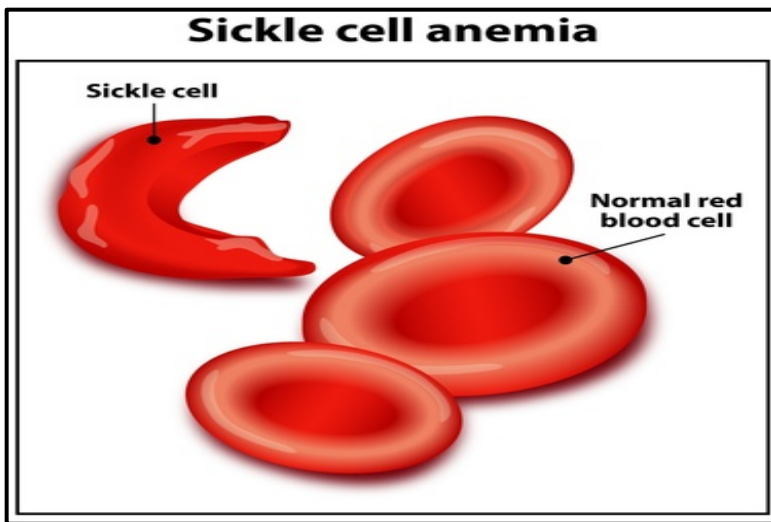
https://classconnection.s3.amazonaws.com/665/flashcards/2470665/png/abiotic_factor1362439889644.png

Abortion termination of a pregnancy; can occur because of natural causes (called a miscarriage) or be a medical intervention.



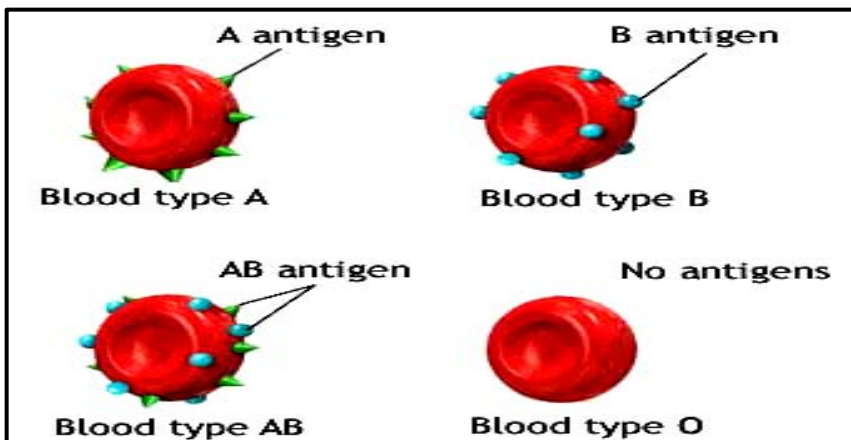
<http://www.priestsforlife.org/resources/medical/de.jpg>

Abnormal hemoglobin Hemoglobin molecule with a different shape due to an altered amino acid sequence (ultimately caused by an altered DNA base sequence), such as in the inherited disease sickle-cell anemia.



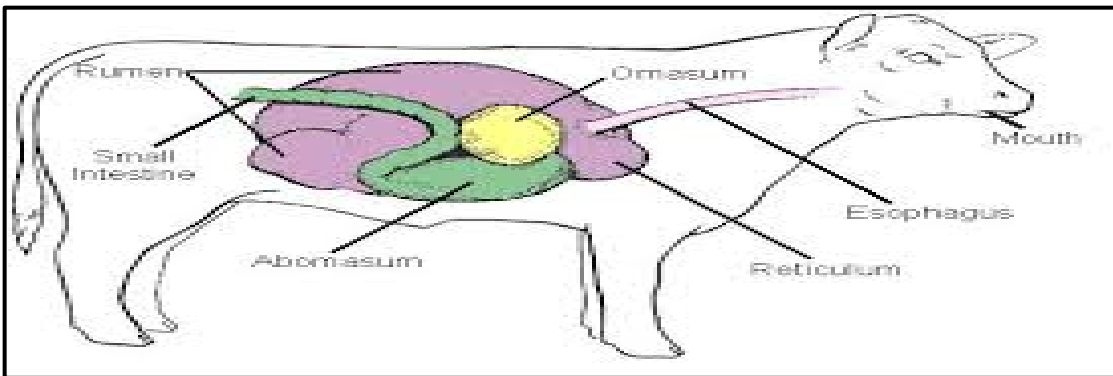
http://media.petridish.org/projects/assets/625/Sickle%20cell%20anemia-1%20copy_detail.jpg?1341334308

ABO system it is the most well-known and medically important blood types are in the ABO group. They were discovered in 1900 and 1901 at the University of Vienna by Karl Landsteiner in the process of trying to learn why blood transfusions sometimes cause death and at other times save a patient. In 1930, he belatedly received the Nobel Prize for his discovery of blood types. All humans and many other primates can be typed for the ABO blood group. There are four principal types: A, B, AB, and O. There are two antigens and two antibodies that are mostly responsible for the ABO types. The specific combination of these four components determines an individual's type in most cases. (See blood group).



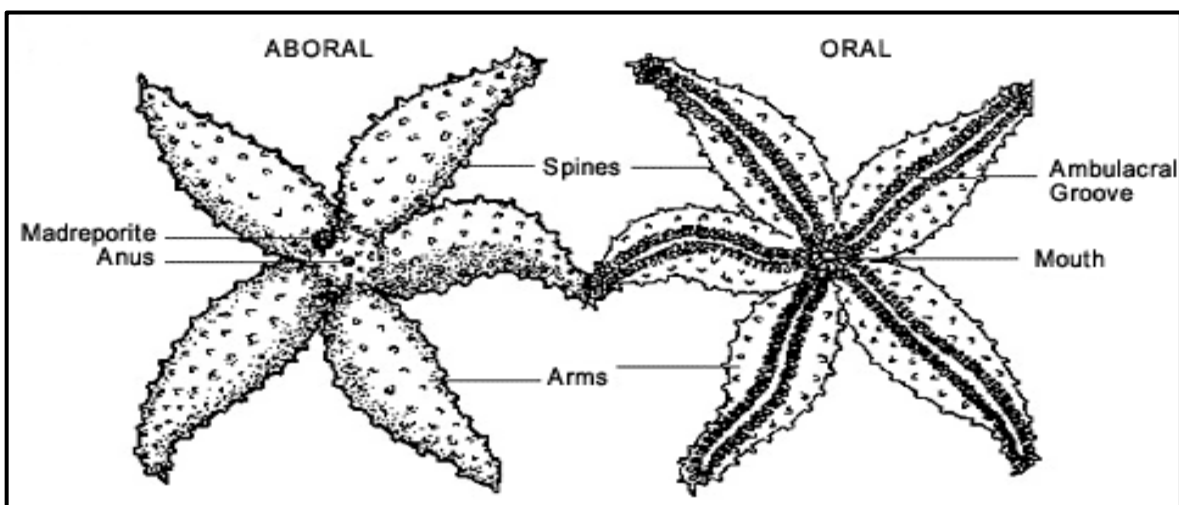
http://uqu.edu.sa/files2/tiny_mce/plugins/imagemanager/files/4281680/dict/a/blood.jpg

Abomasum The fourth Stomach of the cow. The abomasums of suckling calves are used as a source of rennet, a rennin-containing commercial enzyme preparation used to make cheese. The fourth compartment of the stomach of a ruminant; the one where digestion takes place. Part of the ruminant Stomach designed for digestion via secreting enzymes to breakdown food.



<https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTm0kEpMPSFhPoWH5t2676MmMzGsgKLiQG7c5sAF7glQZjsTF7V>

Aboral A region of an animal opposite the mouth.



<http://wdwpi2011.files.wordpress.com/2013/06/strucoralaboral.gif>

Abraliopsis morisii is a species of bioluminescent squid in the family Enoploteuthidae. The species occurs in tropical to warm temperate waters in the Atlantic Ocean, including the Gulf of Mexico and the Mediterranean Sea. This squid has small light organs on the underside of its body for camouflage. It uses this illumination to blend in with the sky, hiding its silhouette from predators watching from below.



http://www.wired.com/wp-content/uploads/images_blogs/wiredscience/2011/01/abraliopsis-squid.jpg

Absciscic acid a plant hormone with the formula $C_{15}H_{20}O_4$, that promotes dormancy in perennial plants and causes rapid closure of leaf stomata when a leaf begins to wilt.

Abscission shedding of flowers and leaves and fruit following formation of scar tissue in a plant.



<https://thegreenthumb20.wordpress.com/tag/abscission/>

Absolute time One of the two types of geologic time (relative time being the other), with a definite age date established mostly by the decay of radioactive elements, although ages may also be obtained by counting tree rings, decay of a specific type of atom, or annual sedimentary layers (such as varves in lakes or layers in a glacier). The term is in some disfavor because it suggests an exactness that may not be possible to obtain.

Absorption The process of absorbing substances into cells or across the tissues and organs through diffusion or osmosis, as in absorption of nutrients by the digestive system, or absorption of drugs into the bloodstream. The process by which the products of digestion are transferred into the body's internal environment, enabling them to reach the cells.

Absorption spectrum a graph showing the relative amounts of light of different wavelengths that are absorbed by a pigment