

Appendix 1

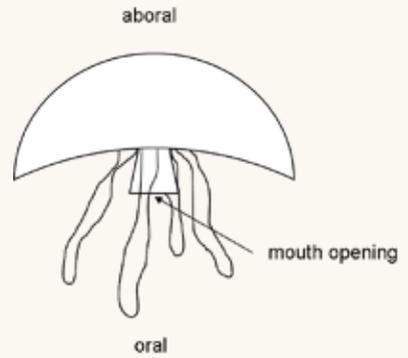
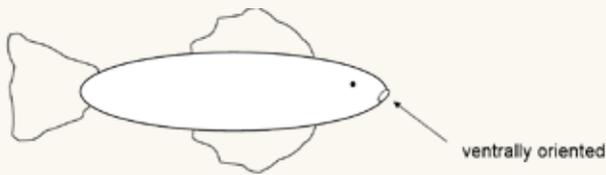
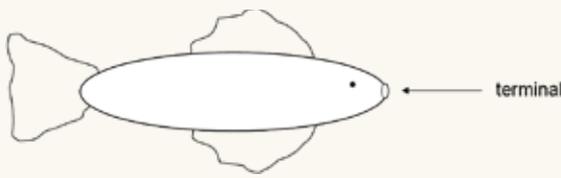
General Glossary

Abactinal	See aboral.
Abaxial	Away from the axis, on its remote side.
Aboral	a. [L. ab, from; os, mouth] 1. Pertaining to, or situated away from the mouth; surface opposite the mouth. 2. (Asteroidea) The surface opposite that bearing the mouth and ambulacral grooves; abactinal; apical; dorsal.
Abyssal	Pertaining to the ocean depth beyond the continental shelf; dark area of the ocean below 2,000 meters.
Adaxial	On the side next to the axis.
Adcauline	On the side next to the stem.
Adoral	Toward or in a position closer to the mouth.
Ambulacral	(Echinodermata) One of the regions of the body associated with the tube feet of the water-vascular system.
Ampullae	(Echinodermata) Part of the water-vascular (ambulacral) system; expanded, bulb-like section of each tube foot (podium).
Anastomosing	Fusion or connection of rami, colonies, zooids, etc.
Annulated	Ringed.
Anterior	a. [L. ante, before] 1. Before or toward the front. 2. Pertaining to the direction in which the head tends to point when an animal is active. 3. (Gastropoda) In a crawling gastropod, pertaining to the head being closest to that part of the apertural margin lying farthest from the shell apex; in high-spired conispiral shells, and some others, anterior is equivalent to abapical.
Anterodorsal	Toward the front and the top or upper side.
Anterolateral	The lateral part of the carapace bordering the subhepatic or hepatic regions.
Aperture	(Ectoprocta) the opening through which the lophophore extends.
Apex (pl. Apexes, apices)	That portion of any structure opposite the base of attachment; the tip.
Apical	a. [L. apex, tip] Refers to the apex or top, as of a conical or spherical structure.
Apodous	Segment without parapodia.
Article	Segment, serially arranged cuticula ring.
Articulate	Jointed; formed of segments; connected by a joint.
Autotomize	To shed a part intentionally; to effect autotomy.
Axial	a. [L. axis, axle] Of or pertaining to an axis; relative to the central axis of a cylindrical body or organ.
Basal	a. [L. basis, base] Pertaining to the base; near the point of attachment of a structure or appendage.
Bathymetric	Pertaining to the science of measuring depths of oceans, seas or other large bodies of water; pertaining to the vertical or altitudinal distribution of organisms.
Bauplan	A German term which more or less means "body plan" or "blue print". It is not a technical nor rigorous scientific term, and is used to convey the general sense of a taxon's total morphology.
Benthic	"Pertaining to the seabottom."
Bifid, bifurcate	Forked.
Biramos, syn. Birrameos	Made of 2 branches.
Biserial	Arranged in 2 parallel rows.
Caudal	a. [L. cauda, tail] Pertaining to a tail or tail-like appendage or extremity; located at or on the tail.

Coelom	The body cavity or space between the body wall and internal organs lined with mesoderm in many metazoan animals.
Coenchyme (pl. Coenchymata)	The visible tissue between polyps. (Octocorallia) Contains the sclerites and mesogloea, and is penetrated by the solenia and gastrodermal canals.
Concave	Rounded and hollow, as the interior of a sphere.
Concentric	Equivalent to comarginal. Concentric refers to the patterns, while comarginal refers to the valve structure.
Confluent	Flowing together; merging; running together as confluent spots without marked lines of distinction.
Conical	Cone-shaped; conic; tapering to a point.
Convergence	Morphological similarity in distantly related forms; homoplasy.
Convex	Having a curved, rounded surface, as that of an external segment of a globe.
Corrugate	Wrinkled; contracted into alternate ridges and furrows.
Cosmopolitan	Worldwide in distribution; ecumenical; pandemic.
Cryptic	Concealing; hidden; protective coloration.
Denticles	Small toothlike structures.
Detritus	An aggregate of fragmentary material, such as decomposing parts of plants and animals.
Diatoms	A major group of eukaryotic algae, and one of the most common types of phytoplankton; consisting of one cell or a colonial group of cells; the cells of diatoms have a symmetrical covering that contains silica, or silicon dioxide.
Dichotomous	Divided (branched) into 2 parts.
Distal	a. [L. distare, to stand apart] Pertaining to any part of a structure farthest from midline of the body or base of attachment; opposed to proximal; for example, towards the tip of the arm.
Divergent	Becoming more separated distally; extending in different directions from the same origin.
Dorsal	a. [L. dorsum, back] 1. Pertaining to the upper surface or back of the body. 2. (Crustacea) In Ostracods in normal position, the upper part comprising the area that contains hinge, eyes, antennules, antennae and stomach. (Ectoprocta) From the pedicle valve toward the brachial valve. 4. (Echinodermata) see aboral. 5. (Mollusca) a. In Bivalvia, the back edge in the region of the hinge. b. In Gastropoda, the back remote from the aperture; the conical top surface of a limpet.
Dorsoventral	a. [L. dorsum, back; venter, belly] In the axis or direction from the dorsal toward the ventral surfaces; bifacial; dorsiventral.
Ectoparasites	A parasite feeding on a host from the exterior.
Endemic	Confined to a given region; indigenous, native.
Epibenthos	The fauna on the surface of the sea bottom.
Epibiotic	Growing or sitting on the surface of other animals.
Frontal	a. [L. frons, fore part of anything, face] 1. Of or pertaining to the front or forehead. 2. (Ectoprocta) Pertaining to the exposed or orifice-bearing sides of the zooecial chambers.
Habitat	The particular kind of environment where a race, species or individual lives.
Halocline	The area of sharp vertical salinity change in the ocean or other saline water.
Hermaphrodite, hermaphroditic	An individual bearing recognizable male and female tissues and producing male and female gametes at some period of the life cycle; monoecious; androgynous; ambisexual; ambosexous.
Histology	The microscopic study of the detailed structure of the organs and tissues of organisms.
Holotype	The single specimen designated or indicated as the type specimen by the original author at the time of original publication of a species (additional specimens are called paratypes).
In situ	Situated in the original, natural, or existing place or position; undisturbed.
In vivo	In or at the living subject; in a natural environment.
Infralittoral	The generally algal dominated zone below low water mark.
Intertidal	The area bounded by the high and low tide lines; also known as the littoral.
Intraspecific	Arising or occurring within a species; involving the members of one species.
Lateral	a. [L. latus, side] 1. Of or pertaining to the side; situated at, coming from, or directed towards. 2. (Crustacea) In Cirripedia, one of a pair of compartmental plates, typically located between the carinolateral and rostrum; latus or median latus.
Laterofrontal	a. [L. latus, side; frons, front] Situated on the side but towards the front.

Lateroventral	a. [L. <i>latus</i> , side; <i>venter</i> , belly] To the side (away from the midline of the body) and below.
Lecithotrophic larva	Obtaining nourishment from a large quantity of stored yolk, as in various invertebrates.
Littoral	Of or pertaining to a shore, coastline, or region between high and low water marks.
Meiobenthos/ meiobenthic	Microscopic and small macroscopic fauna on the sea bottom.
Mesentery	A supporting membrane or one that forms a partition.
Ontogeny	The development or course of development of an individual organism from zygote to maturity; as distinguished from that of a species.
Operculum (pl. Opercula)	Lid.
Oral	a. [L. <i>os</i> , mouth] Pertaining to, near, or in a direction towards the mouth or on the same body side as the mouth.
Oral disc	Upper disc, perforated by a mouth, and bears round its edge a fringe of hollow tentacles.
Ossicle, syn. Plate	A small, usually microscopic skeletal element, embedded in integument; the term is sometimes used to refer to all skeletal elements.
Pedal disc	Base with which anemones are attached to substratum. Usually adherent and more or less flat.
Phytoplankton	Floating or weakly mobile microscopic aquatic plants (algae).
Pinnule	Lateral process of a tentacle.
Plankton	A general name for pelagic (distinguished from coast or bottom forms) floating or weakly mobile animals (zooplankton) or plants (phytoplankton) living at or near the surface of the water.
Planula (pl. Planulae)	A free-swimming ciliated larva, cylindrical to ovoid with 2 cell layers (ectoderm and endoderm).
Posterior	a. [L. <i>posterior</i> , latter] 1. Situated behind; behind the axis. 2. (Bivalvia) Direction along the major axis in which the anus faces and the exhalant current flows.
Posterodorsal	Posteriorly and towards the aboral side.
Posterolateral	Posteriorly and toward the side.
Posteroventral	Posteriorly and towards the oral side.
Proximal	a. [L. <i>proximus</i> , nearest] 1. Toward or nearer the place of attachment or towards the center or midline of the body. 2. (Ectoprocta) Toward the ancestrula.
Reniform	Having the form of a kidney.
Reticulate	Describes the netlike arrangement of plates over a body surface. Degree of open space in a reticulate skeleton can vary.
Sensu stricto	In the strict sense; a limited sense; S.S.
Septum (pl. Septa)	An internal partition represented by an inward projection.
Seta (pl. Setae)	Chitinous structures of hair-like appearance with diverse shapes (e.g. plumose, bifid, simple) and multiple functions (sensory, filter).
Spinelet	A smaller, typically finer, spine-like accessory structure. (Echinodermata) Often present on some plate surface, including paxillae, abactinal, marginal, or actinal intermediate plate.
Stellate	Star-shaped.
Stolon	A flat-lying or creeping structure which lies along the substrate, from which erect branches grow. (Hydrozoa) a tube of perisarc and the tissue inside anchoring a hydroid colony to its substrate.
Sublittoral	In oceans, a zone from the intertidal zone to the end of the continental shelf.
Subtidal	Referring to the zone below mean low-water.
Sulcus (pl. Sulci)	Notch, groove.
Supralittoral	The uppermost littoral zone right below the last flowering plants. Often characterized by lichens.
Swash zone	The zone of wave action on the beach, which moves as water levels vary, extending from the limit of run-down to the limit of run-up.
Terminal	a. [L. <i>terminus</i> , boundary, end] At the end; forming the end of a series or part.
Ventral	a. [L. <i>venter</i> , belly] 1. The lower or underside of the body or the surface of the body that carries the mouth. 2. (Bivalvia) The edge remote from the hinge; opposite the umbones.
Ventrolateral	a. [L. <i>venter</i> , belly; <i>latus</i> , side] Of or pertaining to the area ventrally and to the side.
Zooplankton	Planktonic animals.

other terms



symmetry types and planes

bilateral symmetry

radial symmetry

