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Amoeba. sp



KINGDOM: PROTISTA
PHYLUM: Sarcodistigophora
SUB-PHYLUM: Sarcodina

Amoeba. Sp is a type of Cell or Organism which has the ability to alter its shape, primarily by extending and retracting pseudopods. Amoeba do not form a single taxonomic group. Instead they are found in every major lineage of eukaryotic organism. Amoeboid do not form a single taxonomic. Amoeboid cells occur not only among the protozoa but also in fungi, algae, and animals. Most amoebae were placed in the class or subphylum Sarcodina, a grouping of single celled organism that possess pseudopods or move by protoplasmic flow.

However, molecular phylogenetic studies have shown that Sarcodina is not monophyletic. The appearance and internal structure of pseudopods are used to distinguish group of amoebae from one another. Amoebozoan species, such as those in the genus Amoeba typically have bulbous pseudopods rounded at the end and roughly tubular in cross section.

Cercozoan amoeboids such as Euglypha and Gromia, have slender, thread like pseudopods. Foraminifera emit fine, branching pseudopods that merge with one another to form net like structure some groups. Such as the Radiolaria and Heliozoa, have stiff needle

like radiating axopodia (actinopodia) supported from within by bundles of microtubules.

Antedon. sp



KINGDOM : Animalia
PHYLUM : Echinodermata
SUB PHYLUM: Crinozoa
CLASS : Crinoidea

Antedon is a genus of free swimming, stemless crinoid. The genus first appeared in the fossil record in the Cretaceous period. Members of this genus have no stem but have five pairs of feathery arms arising from a central concave disc. There are a number of cirri. Antedon sp has a vestigial stalk. presence of unbranched appendages on a low, one shaped dorsal ossicle, a bone like structure in the centre of the disc. The mouth and the ambulacral grooves are also on the upper surface. clawed cirri on the lower surface provide temporary attachment to the substrate. There is a great variability in morphological feature in Antenoids found in different habitats and main distinguishing feature among the species is the no. of cirri. The base of the stalk bears upto 40 grasping cirri. Above this is a calyx, a small, cup shaped structure, which is surrounded by 5 pairs of arms which bear feathery pinnules. The arms can be rolled up of danger threatend but they are extended to feed, they are about 10cm long. They are fragile but if one gets broken off, the animal can regenerate it. The colour of this crinoid is quite variable and ranges from white, yellow orange or red to brown and dark purple.

Petromyzon sp



KINGDOM: Animalia
PHYLUM: Chordata
SUB PHYLUM: Vertebrata
SUPER CLASS: Agnatha
CLASS: Cyclostoma

The sea lamprey has an eel like body without paired fins. Its mouth is jawless, round and sucker like, and as wide or wider than the head. Sharp teeth are arranged in many consecutive circular rows. There are 7 branchial opening behind the eye. They are olive or brown, yellow on the dorsal and lateral part of the body, with some black markings, a body weight up to 2.3 kg. This species is found in the northern and western Atlantic Ocean along the shores of Europe and North America, in the western Mediterranean Sea, the Black Sea and in the shores of Great Lake. Sea lampreys are androgamous female in the substrate of streams with moderately strong current. The lamprey uses its suction cup like mouth to attach itself to the skin of a fish and rasps away tissue with its sharp probing tongue and keratinised teeth. A fluid produced in the lamprey's mouth, called lamprosedin, prevents the victims blood from clotting. Victims typically die from excessive blood loss or infection. After one year of hematophagous feeding, lampreys return to the river to spawn and die, a year and a half after the completion of metamorphosis. They are served pickled in Finland.

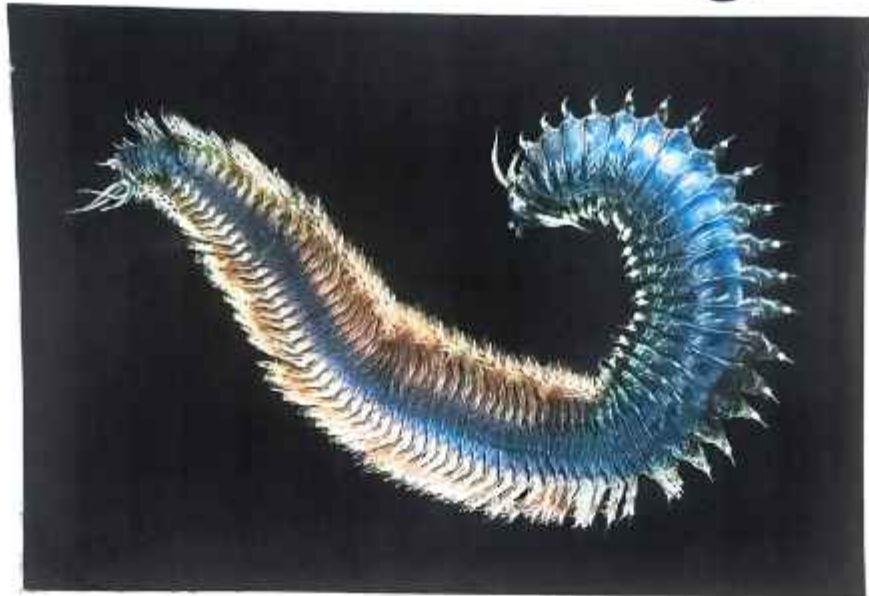
Octopus.sp



KINGDOM: Animalia
PHYLUM : Mollusca
CLASS : Cephalopoda.
SUB CLASS : Cololoidea

The Octopus.sp is a soft bodied, eight limbed mollusc of the order Octopoda. Around 300 species are recognised and the order is grouped within the class Cephalopods with squids and cuttle fish like other cephalopods. The octopus is bilaterally symmetric with 2 eyes and a beak with its mouth at the centre point of the 8 limbs. The soft body can rapidly alter its shape, enabling octopuses to squeeze through small groups. They trail their 8 appendages behind them as they swim. The siphon is used both for respiration and for locomotion by expelling a jet of water. Octopuses have a complex nervous system and excellent sight and are among the most intelligent and behaviorally diverse of all invertebrates. Octopuses inhabit various regions of the ocean, including coral reefs, pelagic waters. Most species grow fast, mature early and are short lived. During breeding the male uses a specially adapted arm to deliver a bundle of sperm directly into the female's mantle cavity after he dies. The female deposits fertilised eggs in a den and cares for them until they hatch after which she also dies. All octopuses are venomous.

Nereis sp



KINGDOM : Animalia
PHYLUM : Annelida
CLASS : Polychaeta

Nereis is a genus of Polychaete worms in the family Nereididae. It comprises many species most of which are marine. Nereis possess setae, which are found on the parapodia. Acicular setae are cylindrical in shape. They are found in sandy areas and they are adapted in shape, found in sandy areas and they are adapted to burrow. Nereis are osmoconformers. Nereis are dioecious and they release their haploid gametes into the water medium, a process called spawning. Nereis or Nereids is a marine polychaete annelid that lives in burrows in the sea bottom and comes out at night to prey upon small animals. The body of Nereis is dorsoventrally flattened, segmented and 30-40 cm long, having 60-120 segments and divisible into the anterior, trunk, and pygidium. The anterior is divisible into the anterior prostomium and posterior peristomium and a mouth is located on the ventral side. The trunk is metamericly segmented and segments are called metameres or somites, each of which bears a pair of parapodia. The last segment is the pygidium.

Salamandra.sp



KINGDOM: Animalia
PHYLUM : Chordata
SUB PHYLUM : Gnathostomata
CLASS : Amphibia
SUB CLASS : Liss Amphibia.
ORDER : Urodela.

Salamandra.sp is an amphibian typically characterized by a lizard-like appearance, with slender bodies, blunt snouts, short limbs projecting at right angles to the body and the presence of a tail in both larvae and adults. All present-day salamanders rarely have more than 4 toes on their front legs and five on their rear legs, but some species have fewer digits and others lack limbs. Their permeable skin usually makes them reliant on habitats in or near water or other cool, damp places. Some salamander species are fully aquatic throughout lives, some take to the water intermittently and others are entirely terrestrial as adults. They are capable of regenerating lost limbs as well as other damaged parts. Researchers hope to reverse engineer the remarkable regenerative process for potential human medical applications such as brain and spinal cord injury treatment. Members of this family are mostly known as newts and lack the coastal grooves along the sides of their bodies typically of other groups.

Sycon.....



KINGDOM: Animalia
PHYLUM: Porifera
CLASS: Calcarea
SPECIMEN: Sycon-sp

Sycon sp is a genus of calcareous sponges belonging to the family Syctellidae. These sponges are small, growing up to 7.5cm and having length from 2.5 to 7.5, and are tube shaped and often white to cream colour. It is a genus of sponges. Sponges are marine invertebrates with a jellylike mesohyl sandwiched between two layers of cells. They are filter feeders maintaining a flow of water through their structure which passes out through large openings called oscula. They have a fragile skeleton composed of stiff spicules. This small porous sponge grows singly or in small groups from a holdfast. It is up to five centimetres long fairly stiff greyish white and spindle shaped. The osculum at the tip is fringed with fine spicules. The surface of the sponge appears fuzzy from its covering of fine papillae. The skeleton consists of a tangential layer of trichactines and rather similar Sycon xaphanus by the fact that the choanocyte chambers are not fused but are free from each other. It is found low down on the shore and in the neritic zone, amongst seaweed, under stones or in rock pools in areas without strong wave action.

Torpedo.sp



KINGDOM: Animalia
PHYLUM: Chordata
SUB PHYLUM: Vertebrata
SUPER CLASS: Gnathostoma
CLASS: Chondrichthyes
SUB CLASS: Elasmobranchii

The Common torpedo also known as the Ocellate torpedo or Cyed electric ray, is a species of electric ray in the family Torpedinidae. It is found in the Mediterranean Sea and the eastern Atlantic Ocean from the Bay of Biscay to Angola waters. For attack and defence, the Common torpedo can deliver a strong electric shock of up to 200V. It is solitary natural ambush predator that feeds mainly on bony fish and crustaceans. The species is aplacental viviparous, with the developing embryos nourished by yolk and histotroph (uterine milk) produced by the mother. Females produce litters of up to 28 young every year in late summer or autumn, after a gestation period of 4-8 months, the specific vary between geographical region. The Common torpedo shock is painful but otherwise of little danger to humans.

Chameleon.sp

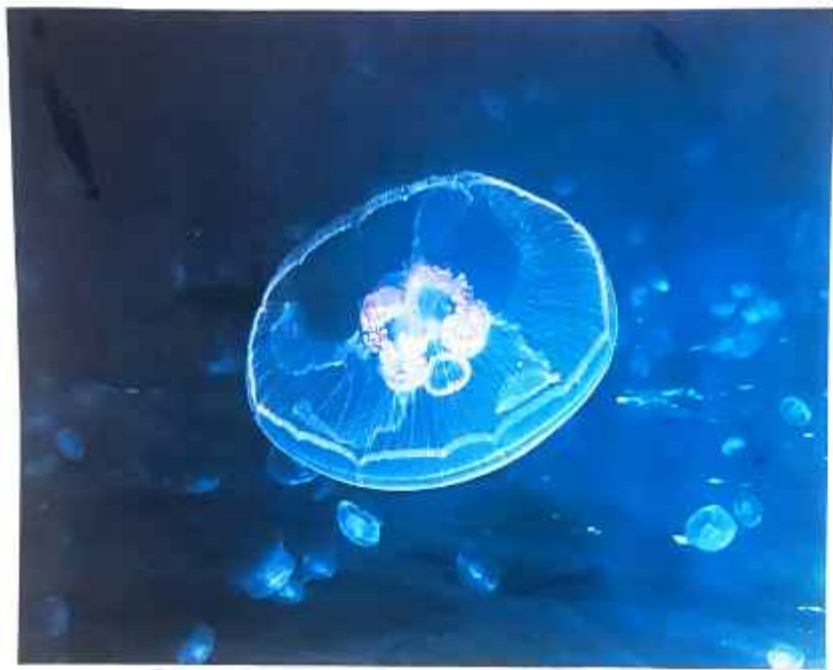


KINGDOM: ANIMALIA
PHYLUM: Chordata
SUB PHYLUM: Vertebrata
CLASS: Reptilia
ORDER: Squamata

Chameleons are a distinctive and highly specialized clade of old world lizards with 202 species described as of June 2015. These species come in a range of colours and many species have the ability to change color.

Chameleons are distinguished by their zygodactylous feet, their very extensive, highly modified rapidly extendable tongues, their swaying gates and crests or horns on their brow and snout. Most species, the larger ones in particular also have a prehensile tail. Chameleons eyes are independently mobile, but in aiming at a prey item they focus forward in coordination, affording the animal stereoscopic vision. Chameleons are adapted for climbing and visual hunting. They live in warm habitats that range from rain forest to desert condition with various species occurring in Africa, Madagascar, Southern Europe and across Southern Asia as far as Sri Lanka.

Aurelia sp



KINGDOM: Animalia

PHYLUM: Cnidaria

CLASS: Scyphozoa.

Aurelia is a genus of Scyphozoan jellyfish, commonly called moon jellies. There are at least 13 species in the genus Aurelia including many that are still not formally described. It has been suggested that Aurelia is the best studied species in the genus. Studied species in the genus with Aurelia aurita the best studied species. Two other species, Aurelia labiata and Aurelia limbata have also been investigated. Since most previous studies of Aurelia were done without the benefit of genetic identification one cannot positively attribute the results of most research to the species named. Species of Aurelia can be found in Atlantic Ocean, the Arctic ocean, and the Pacific Ocean, and are common to the waters off California, northern China, Japan, Korea, Australia, New Zealand, The Black Sea, Indonesia, the eastern coast of the United States as well as Europe. Aurelia undergoes alternation of generations whereby the sexually reproducing pelagic medusa stage is either male or female and the benthic polyp stage reproduces asexually. Meanwhile life cycle reversal, in which polyps are formed directly from juvenile and sexually mature medusae or their fragments was also observed in Aurelia sp.

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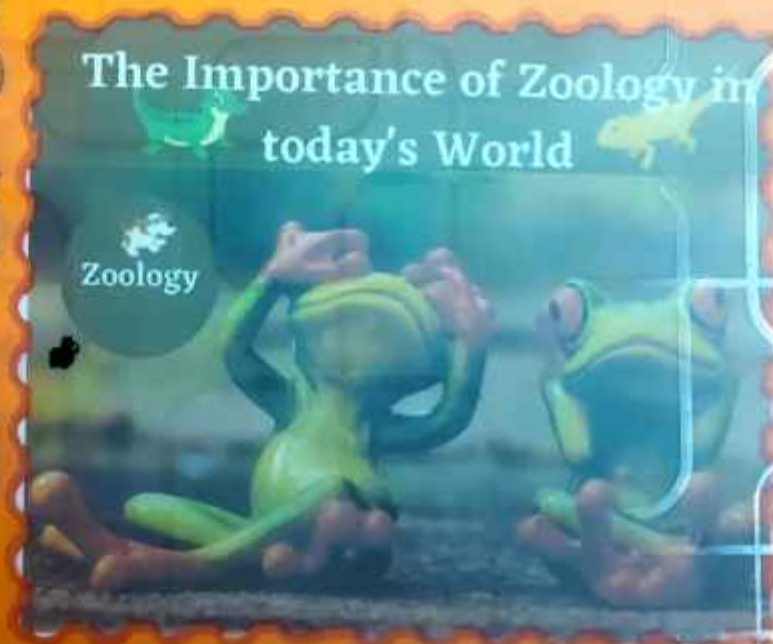
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AMOEBA



QUESTIONS

KINGDOM: PROTISTA

PHYLUM: SARCOMASTIGOPHORA

SUB-PHYLUM: SARCODINA

Amoeba sp. is a type of cell or organism which has the ability to alter its shape, primarily by extending and retracting pseudopods. Amoeba do not form a single taxonomic group, instead they formed and found in every major lineage of eukaryotic organism. Amoeboid cells not only occur among protozoa, but also in fungi, algae and animals.

Molecular phylogenetic studies have shown that Sarcodina is not a monophyletic group. The appearance and internal structure of pseudopods are used to distinguish groups of Amoeba from one another.

SYCON



KINGDOM:- ANIMALIA

PHYLUM:- PORIFERA

CLASS :- CALCAREA

Sycon species is a genus of calcareous sponges belonging to the family Sycettidae. These sponges are small growing upto 7.5 cm and having length from 2.5 to 7.5 cm and are tube shaped and often white to cream in colour. Sponges are marine invertebrates with a jelly-like mesophyll sandwiched between two layers of cells. They are filter feeders maintaining a flow of water through their structure which passes out through large openings called oscula. Skeleton made of stiff spicules and grow singly or in small groups from holdfast.

SEA-ANEMONE



KINGDOM: ANIMALIA

PHYLUM: CNIDARIA

CLASS: ANTHOZOA

Sea-anemone are cnidarians that live in the sea. They are polyps, one of basic forms of the phylum. They are predatory animals, which paralyse their prey with stinging nematocytes. They fire a harpoon-like structures which delivers a dose of neurotoxins. They are sessile and like to stay in one area. Anemones can be found in deep oceans as wells and you are open sea. They live in symbiosis with other animals like clown fish, bicarbonate jelly and arrow crab which take shelter among anemones.

NEREIS



CHARACTERISTICS

KINGDOM :- ANIMALIA

PHYLUM :- ANNELIDA

CLASS :- POLYCHAETA

Nereis is a genus of polychaete worms in the family Nereididae. It comprises many species which are marine, possess setae, which are found on parapodia.

Acellular setae provide support. Locomotor

chaetae are for crawling, and the bristles are visible on the exterior of Polychaeta. They are cylindrical in shape, found in sandy area and are adapted to burrow.

They are osmoconformers, are dioecious and release their haploid gamete into the water medium, a process called spawning. They are dorsoventrally flattened, prey at night.

SCORPION



KINGDOM :- ANIMALIA

PHYLUM :- ARTHROPODA

CLASS :- ARACHNIDA

Scorpions are predatory arachnids of order Scorpiones. They have eight legs and are easily recognized by a pair of grasping pincers and a narrow, segmented tail, often carried in a forward curve over the back and always ending with a stinger. They mainly live in deserts but have adapted to a wide range of environmental conditions, can be found on all continents except Antarctica.

They primarily prey on insects and other invertebrates, but some species hunt vertebrates. They use their pincers to restrain and kill prey or prevent their own predation. Venomous sting is used for offense and defense.

Octopus Sp.



KINGDOM :- ANIMALIA

PHYLUM :- MOLLUSCA

CLASS :- CEPHALOPODA

SUB-CLASS :- COLIDEA COLECIDEA

The Octopus sp. is a soft bodied, eight limbed mollusca of the order Octopoda. Around 300 species are recognized and order is grouped within class Cephalopoda with squids and cuttlefish. They are bilaterally symmetric with two eyes, and a beak in its mouth at the centre point of the eight limbs. The soft body can alter its shape rapidly enabling them to squeeze through small groups. They trail their eight appendages behind them to swim.



STARFISH

KINGDOM :- ANIMALIA

PHYLUM :- ECHINODERMATA

CLASS :- ASTEROIDEA

Starfish or sea stars are star-shaped echinoderms belonging to class Asteroidea. They are also referred to as brittle stars or basket stars. About 1900 species of starfish live on seabed in all the world's oceans, from warm, tropical zones to frigid, polar regions. They are marine invertebrates having a central disk with usually five arms. Aboral surface may be smooth, spiny or granular and covered with overlapping plates. They have tube feet operated by hydraulic system. Mostly predate on benthic invertebrates. They are brightly coloured in various shades of red or orange while others are blue, grey or brown and can regenerate themselves.

TORPEDO [ELECTRIC RAY]



KINGDOM:- ANIMALIA
PHYLUM:- CHORDATA
SUB-PHYLUM:- VERTEBRATA
SUPER-CLASS:- GNATHOSTOMA
CLASS:- CHONDRICTHYES
SUB-CLASS:- ELASMOBRANCHII

The Common Torpedo also known as electric ray or ocellate torpedo, found in the Mediterranean sea and the Eastern Atlantic Ocean from the Bay of Biscay to Angola waters. For attack and defense, they can deliver a strong electric shock of upto 200V. It is solitary nocturnal, ambush predators that feeds mainly on bony fish and crustaceans. Torpedo electric organ composed of modified muscle cells, useful in neurobiological study of neuromuscular junction. For example, agrin was first isolated from Torpedo.

CHAMELEON



KINGDOM :- ANIMALIA

PHYLUM :- CHORDATA SUB-PHYLUM :- VERTEBRATA

SUPER-CLASS :- GNATHOSTOMATA CLASS :- REPTILIA

ORDER :- SQUAMATA

Chameleons are a distinctive and highly specialized clade of old world lizards with 202 species described as of June 2015. These species come in a range of colours and many species have ability to change colour. They are adapted for climbing and visual hunting. They live in warm habitats that range from rainforest to desert conditions, occurring in Africa, Madagascar, southern Europe and across Southern Asia as far as Sri Lanka. They have been introduced to Hawaii, California and Florida. The oldest chameleon is *Anqingosaurus brevicephalus* from Middle Paleocene of China. Birds and snakes are important predators of adult chameleons.

TESTUDO



KINGDOM :- ANIMALIA

PHYLUM :- CHORDATA

SUB-PHYLUM :- VERTEBRATA

SUPER-CLASS :- TETRAPODA

CLASS :- REPTILIA

SUB-CLASS :- ANAPSIDA

Testudo, the Mediterranean tortoise, are genus of tortoises found in North Africa, Western Asia and Europe. They are small tortoises ranging in length from 7.0 to 25cm and in weight 0.7 to 7.0 kg. They are found in fresh-water or salt water or land. It feeds on small worms and insects and also hibernates during winter season. Feet adapted for walking on land, limbs built with sprawling gait, clawed digits with two phalanges. Eggs laid in holes (nests) in ground, dug and covered by females. Toes not webbed.