

*Corals, anemones, and sea jellies are all in a group of animals called cnidarians (pronounced nigh-dare-ee-ans). The name comes from the Greek word 'cnidos', meaning "stinging nettle". A key feature of these animals is the presence of nematocysts, or stinging cells, found mainly in the tentacles.*

*Cnidarians have a relatively basic body form which consists of a cup-shaped body with tentacles. They all display radial symmetry, meaning their body parts extend outward from the centre. There are two distinct body forms and some species have both body forms during their life cycle:*



**Polyps** have a tubular body, attached at the base to the seabed or each other (in a colony) and their tentacles point upwards.



**Medusa** are generally free-swimming, bell-shaped animals with tentacles that dangle below the main body.

Cnidarians have a central mouth that also functions as the anus and leads into the stomach called the coelenteron. The earlier classification for cnidarians, that of Coelenterata, originated from this organ. The coelenterates, however, also included the Ctenophora (comb jellies and sea gooseberries), that are without stinging cells. Hence Ctenophora and Cnidaria are now separate phyla.

Cnidarians are divided into four classes:

### Hydrozoa

The name 'hydrozoa' means water animal but is also associated with the 'hydra' or many-headed serpent. This makes sense when you realise that whilst they may look like a single animal, they are a colony (individuals living together and interacting in advantageous ways). Hydrozoans include blue bottles and hydroids.



### Anthozoa

Anthozoans (meaning 'flower animals') include corals, sea pens, sea fans and anemones. They exist only as polyps, which are solitary as with anemones or colonial as is the case for corals. The mouth is surrounded by one or more rows of tentacles – hence they may look like flowers.



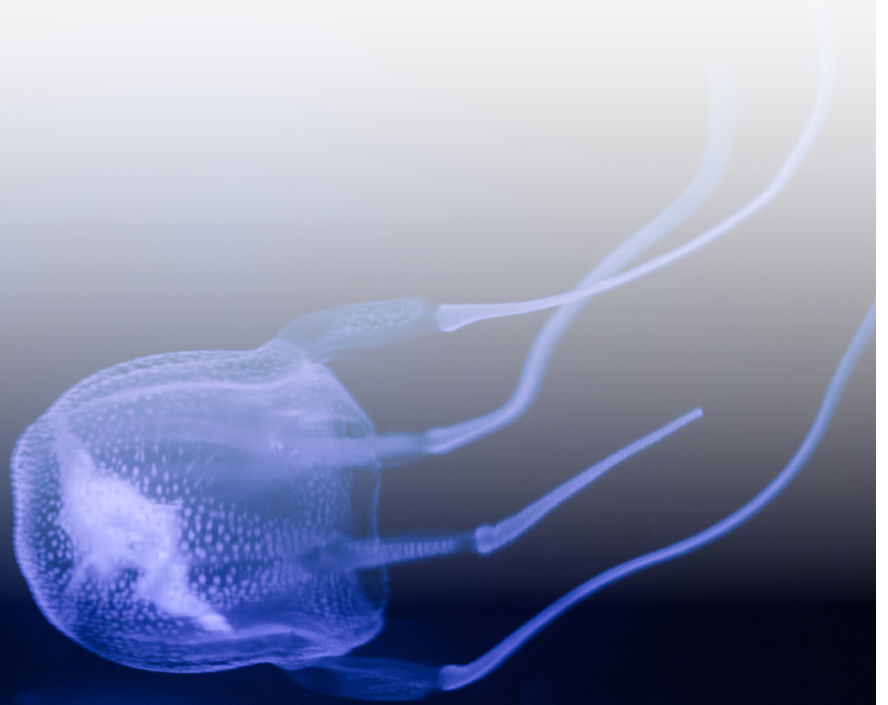
## Scyphozoa

Sea jellies have a bowl or bell-shaped body with three layers – the middle layer consisting mostly of a jelly-like substance that gives these animals their common name. The body is fringed with tentacles and oral arms, which are often mistaken for large tentacles. The oral arms join the underside of the bell at the mouth, which then leads directly to the stomach.



## Cubozoa

Cubozoans or box jellies are so named due to their square shape when viewed from above. They exist only as a medusa, with single tentacles or clusters of tentacles found on each corner of the base of the cube-shaped bell.



The most infamous cubozoan - the Box jellyfish - can inflict a painful and sometimes fatal sting!