



Cuttlefish
 These creatures have do have suckers on their eight arms and two tentacles. They have blue blood pumped by three hearts, and W-shaped pupils. Cuttlefish have what is called a cuttlebone, which is hard and porous to help keep it buoyant. There have been studies with them that show that they can learn, to do various tasks, not dissimilar to how a dog might. The ability for cuttlefish to match their environment is unrivaled, they can even mimic a checker board.



Detail of Pupil

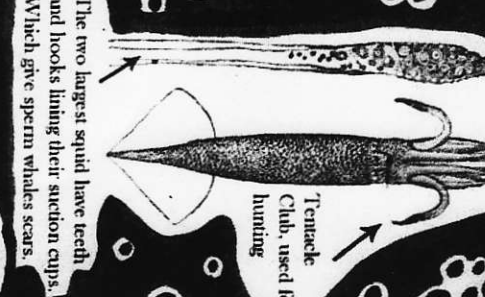


Squid
 These come in many shapes and sizes the smallest being less than an inch long, the largest growing to 65 feet long. In the deep oceans they make their own light to hunt and to communicate with each other. There is a soft inner shell left from their mollusk ancestors.



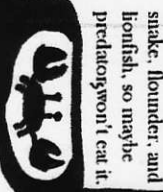
The mouth is called the beak it can be as big as your fist.

Some octopus deliver venom with it too.



Tentacle Club, used for hunting

Octopus
 This creature has no shell, and can fit wherever its beak can. Two-thirds of its nerve cells are found in its eight arms, so they are incredibly sensitive. Octopus have also been shown to learn things, which has made them especially protected, giving them night that other invertebrates don't normally have. They have been known to crawl out of water when no one was looking, to steal crab, and slip back to their home unnoticed.



There is an octopus that can mimic a sea snake, flounder, and lionfish, so maybe predators won't eat it.

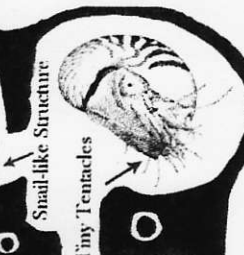


Canalaged Shell: Dark Brown Striped Top

Nautilus
 This creature is the only one that has retained its outer shell. They are thought of as living fossils because they have survived unchanged for millions of years.



The Nautilus can have up to ninety tiny tentacles which have no suction cups, and can live up to 20 years, outliving most of their cousins by at least 15 years. Their shells are sometimes so recently used in jewelry humans have begun to farm them.



Snail-like Structure

Tiny Tentacles

What is a Cephalopod, you say? Well!
 Cephalopod are Mollusks, this name also includes snails and clams. However, they have adapted the Mollusk foot into arms or tentacles. Some have kept the shell but others either have an internal or none whatsoever.



Shell

Foot



Tentacles

Internal Shell

They stand apart from their crawling companions because of their abilities. They are able to change color and shape, glow in the dark, and use jet propulsion. Cephalopods are the most intelligent squishy creature, and can be found in every ocean, but we have just scratched the surface.



Why are Cephalopods so Fantastic?
 To put it simply, they have been adapting to their environment for millions of years, longer than we have existed. Their soft bodies drove them to be more cunning so they could eat before being eaten, and hide where no one could find them. Natural Selection drove their evolution in directions we would expect to see on another world. They have come up with solutions to the same problems we have but in completely different ways, that sometimes put us to shame. If they get any more incredible than they are Cephalopods may be ruling the world one day after we are long gone.

Further Information:
<http://tolweb.org/Cephalopoda>
<http://www.thecephalopodpage.org/>
<http://www.utmb.edu/nrcc/>

Kate Hall 2007