

**Cuttlefish**  
 These creatures have do have suckers on their eight arms and two tentacles. They have blue blood pumped by three hearts, and V-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

**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 used in jewelry sometimes so recently humans have begun to farm them.



Canalloged Shell: Dark Brown-Striped Top

Small-like Structure

Tiny Tentacles

Whale Under-side

**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.

**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.

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.



Shell

Foot

Tentacles

Lateral Shell

**Squid**  
 The two largest squid have teeth and hooks lining their suction cups. Which give sperm whales scars.

The mouth is called the beak it can be as big as your fist. Some octopods deliver venom with it too.



Tentacle Club, used for hunting



**The Incredible Cephalopod**

Alien on Earth

**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. Octopods have also been shown to learn things, which has made them especially protected, giving them right 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.



**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://toweb.org/Cephalopoda>

<http://www.theccephalopodpage.org>

<http://www.utmb.edu/nrc>

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