

## Orthoceras regulare

Orthoceras (straight horn) is a genus of extinct nautilus.

These fossils date back to the Silurian Age (400 + million years ago) and are one of the earliest recognizable animals. They are ancestors to the modern day squid. Even though they were among the earliest forms of life, this class of nautiloid is still considered one of the most intelligent forms of ocean life. The Orthoceras ranged in size from a few inches in length to over six feet! They could swim as well as crawl on the ocean floor. By filling the chambers in their shells with air they could float through the seas propelling themselves by squirting jets of water. As they died their shells accumulated upon the ocean floor, then covered by sediments so they changed into stone over the ages. Having a long straight shell their fossils have an iridescent gemlike quality when polished. These Orthoceras specimens are from the Atlas Mountains in Morocco



Kingdom: Animalia  
Phylum: Mollusca  
Class: Cephalopoda  
Subclass: Nautiloidea  
Order: Orthocerida  
Family: Orthoceratidae  
Genus: ***Orthoceras***  
Species: ***O. regulare***

## Nautilus

Nowadays there are 650 species of known cephalopods, but there are more than 7500 proven from fossil remains. The first fossil cephalopods appeared in the Cambrian period more than 500 million years ago. These specimens are from Madagascar and you can see how little they have changed over the millions of years by comparing the fossil specimens to modern day shells. These fossils are from the Cretaceous period (100 million years ago).

The class Cephalopoda today is divided into three subclasses, of which only two are still present on earth with recent species: The archaic Nautiloidea, relatives of the nautilus, and the more "modern" Coleoidea, relatives of octopuses, squids and cuttlefish.

The third subclass, Ammonoidea, relatives of the Ammonites, by the end of the Cretaceous period more than 60 million years ago, has become completely extinct.

Most interestingly the first cephalopods to appear in the Cambrian period were relatives of the nautilus, called Ellesmeroceratida.



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Order: Nautilida  
Suborder: **Nautilina**  
Family: **Nautilidae**