

The Paper Nautilus

Although the Paper Nautilus has the same last name as the Chambered Nautilus and although they look somewhat similar in that both are rounded and coiled, the animals are actually not alike at all. The Chambered Nautilus shell acts as a house for the animal that lives in its outermost chamber. The Paper Nautilus shell is actually built by the female as housing for her eggs she places inside in long threads. The Paper Nautilus is closer to its relative the octopus, as both animals have eight tentacles and a rounded body. The female nautilus lives inside the shell while protecting her eggs. Her mate is actually about one-fifth her size.

The name Paper Nautilus comes from the appearance of the fragile, thin, ribbed shell. It is a two-sided shell up to eight inches long. It resembles the shell of the Chambered Nautilus in that it is curved with a distinct opening at the end. But it is much thinner and stark white in color. The female secretes the substance that makes it before laying her eggs. When protecting the eggs, the female uses flap-like sails, which spread, from the first tentacle pair over the shell. The flap-like sails can also be used to catch food. After the shell is no longer needed, it falls to the bottom of the ocean or is sometimes found on beaches and collected by shell collectors. The shell is considered a prize find because not only it is very beautiful, but also rare to find. It is very rare for a person to find a shell on the beach with a female still inside. Because of its deep-water habitat, the animal is rarely seen on the surface in the pelagic zone. When observed, the female nautilus is seen with her head and tentacles reaching out of the opening of its shell.

The Paper Nautilus lives in tropical and subtropical ocean waters in the pelagic zone, the deep part of the ocean. Usually found on the surface, they look for food during the day. Octopus cousins usually live on the seafloor coming out of their caves or enclosures at night hunting for food. As such, they are called nocturnal animals. The Paper Nautilus has large eyes and a sharp beak as do most octopuses and both eject ink as a way to fend off predators. Females of both animals stay with their eggs until the young hatch.

The Paper Nautilus preys on invertebrates such as jellyfish and salps - tiny, transparent barrel shaped animals that live in warm oceans. In return, larger ocean animals such as dolphins and tunas prey on the nautilus.

When you discover the beauty of a Paper Nautilus shell, you now can appreciate the amazing feat of the female animal that created it.

Name _____

Date _____

The Paper Nautilus Questions

Use a dictionary and the article to find definitions for these vocabulary words:

pelagic zone

relative

carnivorous

secrete

salps

tropical

nocturnal

predator

prey

The Paper Nautilus Questions (Cont'd)

Use the article to answer the following questions in complete sentences:

1. What does a Paper Nautilus shell look like?
2. Where does the Paper Nautilus live?
3. In what ways does the Paper Nautilus resemble a Chambered Nautilus? How do they differ?
4. How is it like an octopus?
5. How is it different from most octopuses?
6. How does the female lay her eggs?
7. How does she protect her eggs?
8. Where would you most likely find a Paper Nautilus shell?

Name _____

Date _____

The Paper Nautilus Answers

pelagic zone – the deep part of the ocean

carnivorous- feeds mainly on other animals

salps – tiny, barrel shaped, transparent animals that inhabit warm oceans

nocturnal - occurring at night

prey – (noun) animals that are caught by other animals
(to hunt other animals for food)

relative – related or having something in common

secrete - produce a fluid

tropical – relating to the tropics - areas of warmth and humidity on the globe

predator – a carnivorous animal that hunts and eats other animals

The Paper Nautilus Answers (Cont'd)

1. The shell of a Paper Nautilus is composed of two sides with an opening at the end. The shell is rounded like a Chambered Nautilus, ribbed, stark white, paper thin, and can be up to eight inches long.
2. The animal lives in tropical and sub-tropical oceans usually near the surface in the pelagic zone.
3. Both the Chambered Nautilus and Paper Nautilus are rounded, coiled shells. The animal lives inside the outermost chamber of the Chambered Nautilus. The Paper Nautilus lives outside the shell that the female creates for her eggs. Only when she is watching over her eggs does she inhabit the shell.
4. The Paper Nautilus is like most octopuses in that it:
 - has a sharp beak
 - hunts invertebrates (carnivorous)
 - ejects ink to ward off its prey
 - has eight tentacles
 - has a rounded body
 - female protects eggs
5. The Paper Nautilus is unlike most octopuses in that it:
 - hunts during the day
 - lives at surface rather than seafloor
 - secretes a shell for its eggs
 - female in shell when protecting eggs
6. First the female secretes a substance to produce the shell and then she lays her thread-like eggs inside the shell, which she protects until they hatch. Then she discards the shell.
 7. The female stays at the opening of the shell to protect her eggs, only showing the front part of her body and her tentacles. She can withdraw inside if a predator is present.
8. Most likely you would find the shell of a Paper Nautilus blown on a sandy beach in a tropical or subtropical area of the world after it was discarded by the female.