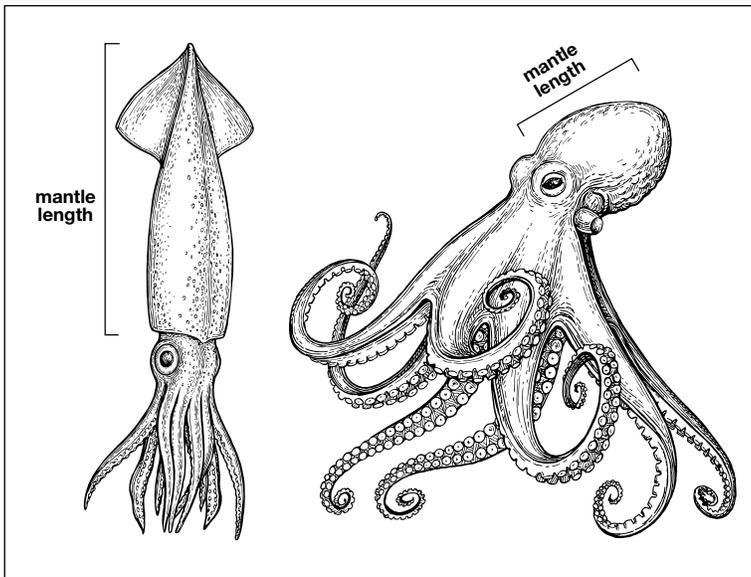


How Big Is a Squid?

Cephalopods (sef-ah-loh-pods) are a large class of animals in the phylum Mollusca. They include octopuses, squids, cuttlefish, and nautiluses. There are about 800 known living species in the class. Not only are cephalopods highly variable in shape and habitat, they vary in size, as well.

The smallest known cephalopod is the Thai bobtail squid (*Idiosepius thailandicus*) – females have a mantle length of 10 millimeters (0.4 inch) and males 7 millimeters (0.3 inch) at full growth. The longest known cephalopod is the giant squid (genus *Architeuthis*), which has been measured at 2.4 meters (7.9 feet) mantle length and up to 15 meters (49 feet) total length. (The colossal squid has a longer mantle length, but is shorter overall.)

In order to see the sizes of different cephalopods, make a set of size reels.



How do you measure a squid?

Because cephalopods' arms and tentacles can stretch, or can be damaged, total length is difficult to measure. Generally speaking, scientists use *mantle length* to compare cephalopods. The mantle is the "body" of the animal, behind the head and arms/tentacles.

Materials

- Small pieces of corrugated cardboard about the size of an index card
- String, yarn, or parachute cord
- Scissors
- Measuring tape
- Markers
- Printed pictures of cephalopods (optional)
- Brightly colored masking, duct, or washi tape

What to do

1. For each cephalopod, measure out the *total length* in your string/yarn. Tie one end of the string to a piece of cardboard and write the name of the cephalopod on the card. (Optional: Print out a picture and tape or glue it to the card, as well.)
2. Along the same string, measure out the *mantle length* from the card. Put a piece of brightly colored tape at this point on the string.
3. Lay your size reels out next to each other in a long hallway, driveway, or other space. Why do you think the sizes vary so much? What patterns do you notice?

Extension

There are more than 800 species of cephalopod. Research some more and make more size reels for species not listed here. You can also make size reels for the sizes of sharks, whales, and many other kinds of animals.

COMMON NAME	SCIENTIFIC NAME	MANTLE LENGTH	TOTAL LENGTH
Thai pygmy or bobtail squid	<i>Idiosepius thailandicus</i>	7-10 millimeters	10-18 millimeters
Giant squid	<i>Architeuthis sp.</i>	2 meters	13 meters
Colossal squid	<i>Mesonychoteuthis hamiltoni</i>	3 meters (estimate)	10 meters (estimate)
Giant Pacific octopus	<i>Enteroctopus dofleini</i>	50-60 centimeters	2.75 meters
Giant cuttlefish	<i>Sepia apama</i>	50 centimeters	1 meter
Blue-ringed octopus	<i>Hapalochlaena maculosa</i>	5 centimeters	10 centimeters
Vampire squid	<i>Vampyroteuthis infernalis</i>	15 centimeters	30 centimeters
Humboldt squid	<i>Dosidicus gigas</i>	2.5 meters	3 meters