

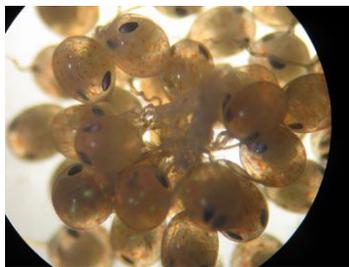
It's the Cycle of Life!



Organisms go through different changes in their life cycle as they grow. This process is called *metamorphosis*. Ocean animals can have complex life cycles, or several different stages, as they grow into adults. Juvenile, or baby crabs, have an especially interesting way of becoming adult crabs. As they develop, they shed their exoskeleton, or skeleton on the outside of their body, so that the soft parts inside of their bodies can grow. This process is called *molting*. Vertebrates do not have an exoskeleton to molt because their backbone and skeleton can grow inside them along with the rest of their body.

After mating, a female, or girl crab, begins by carrying her eggs on her abdomen (underbelly) and then releases them into the water. After the eggs have had time to develop, they hatch into larva called *zoeae* (pronounced zoh-eh-uh.) These zoeae are very small and float with the ocean currents because they are not strong enough to swim. After about 4-5 weeks and several molts later, these zoeae develop into *megalops*. Even though megalops are bigger than zoeae, they are still too small to swim. They are slowly starting to look like a crab. This stage lasts about 1 week until the megalops have molted into juvenile, or baby crabs. At this point in their life, they can now swim or walk along the bottom of the ocean floor and be able to hide in seaweed or in between rocks to hide from predators. Juvenile crabs will molt many, many times before eventually becoming adults. This entire life cycle can take about 12-18 months, depending on the temperature and saltiness of the ocean water. Below are images of a crab's life cycle:

Crab eggs:



Zoeae:



Megalops:



Adult crab:



Juvenile crab:



Observation Lab Activity:

Some of the most fascinating invertebrates can be found right in your backyard! With your parents permission, explore and observe invertebrates you find around the outside of your house (backyard, front yard, patio, etc...) Choose two invertebrates you have observed and research their stages of metamorphosis. Draw and label their life cycles in the spaces below. If you are unable to find any critters, you can choose from these animals:

Butterfly Frog Ant Spider Grasshopper Beetle
Sea jelly Sea anemone Lobster Sea Star Sea urchin

Life Cycle #1:

Life Cycle #2: