

Reader Clues

Life of Shrimp: From the Gulf to Your Dinner Plate

Life Cycle (6 cards)

READER: I am a tiny, almost invisible particle deep in the Gulf of Mexico. After I am fertilized and released, I rise up through the water column and float to the surface of the water. Depending on which species I am, spawning might happen all year round but I spawn the most when the water temperature is warmer from April to September. Small fish at the bottom of the Gulf of Mexico sometimes eat me while they are swimming. When I rise to the surface of the water, zooplankton and filter feeders (such as sting rays) might eat me while they are swimming, for some lagniappe nutrition. **What am I?**

ANSWER: Shrimp Egg

READER: As I float at the surface of the water in the Gulf of Mexico, I go through several stages of growing and molting. I am small and can't control how I move or what I eat. As I float through the water, I feed on nanoplankton, zooplankton, phytoplankton, and pieces of detritus. Small fishes and filter feeders sometimes eat me for lagniappe nutrition as they swim through the water. As I grow, flood tides and wind-driven currents carry me towards the Louisiana shore. When I notice that there is a lot of light in the water during the day, I move down in the water column to escape predators. **What am I?**

ANSWER: Shrimp Larva (singular) or Larvae (plural)

READER: As I keep maturing into a tiny crustacean, tides and currents carry me into brackish water in Louisiana estuaries. For the next four to six weeks, I stay on the muddy bottom and graze on detritus and phytoplankton. I start to develop swimming and walking legs. I also look for worms, animal detritus, and zooplankton on the estuary bottom and on the outer parts of bottom-dwelling organisms. I help keep water in the estuary healthy by eating detritus. **What am I?**

ANSWER: Postlarva Shrimp

READER: Over the next one to two months, I move through the estuary as far inland as there is salty water. My favorite place to be is in shallow salty water near the edges of the marsh. In these areas, marsh plants will provide cover from predators as well as plant detritus for me to eat. While I forage on the soft muddy bottom, I increase turbidity in the water, which helps bacteria grow. In addition to plant detritus, I also eat parts of worms, snails, fish, copepods and other crustaceans. I spend this time moving through the estuary, eating and growing. **What am I?**

ANSWER: Juvenile Shrimp

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READER: As temperature and salinity changes, I continue to grow and move down through the estuary back towards the Gulf of Mexico. I continue to eat plant and animal detritus. Sometimes, I eat juvenile shrimp! **What am I?**

STUDENT: Subadult Shrimp

READER: When I get back to the Gulf of Mexico, I continue to eat and grow. I live in deep water, anywhere from 60 to 500 feet below the surface of the water. I'm a year old at this point, and I usually end up getting caught by a shrimper or eaten by larger fish. If I'm a female and I survive, increasing water temperature will stimulate me to spawn and release thousands of shrimp eggs, beginning the life cycle all over again. **What am I?**

ANSWER: Adult Shrimp

Predators (4 cards)

READER: What kind of predators does a juvenile shrimp have?

STUDENT (with the predatory fish card for juvenile shrimp will answer): Southern Flounder, Spotted Seatrout, Red Drum, Inshore Lizard Fish, Atlantic Croaker, or Pinfish

READER: What kind of predators does a subadult shrimp have?

STUDENT (with the predator card for subadult shrimp will answer): Pinfish, Sheepshead, Red Drum, Black Drum, Atlantic Croaker, Sand Seatrout, Sea Catfish, Gafftopsail Catfish, Southern Kingfisher, Southern Flounder, or Spotted Seatrout

READER: What kind of predators does an adult shrimp have?

STUDENT (with the predatory fish card will answer): Spotted Seatrout, Lady Fish, Crevalle Jack, Bluefish, Florida Pompano, Spanish Mackerel, Silver Seatrout, Black Tip Shark, Atlantic Sharpnose Shark, Gulf Kingfish, Red Snapper, Sand Seatrout, or Redfish

READER: I grew up in South Louisiana, and I live on the bayou with access to the Gulf of Mexico. I have a boat with several trawl nets. I drag the nets behind the boat to scrape the muddy bottom of the estuaries to catch subadult shrimp. I also drag the nets behind the boat to scrape the bottom of waters just off the Louisiana coast

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to catch adult shrimp. I am busiest with my job from April to September. When I've caught enough shrimp to fill up my boat, I take my boat back to the dock. **Who am I?**

ANSWER: Shrimp Captain

Shrimp Businesses (5 cards)

READER: I work at a business that has been around for over 100 years. When my boss buys fresh shrimp at the dock, he brings the smallest shrimp to the business building, and I boil it. Then, I lay the boiled shrimp on conveyor belts, which pass over central heaters that heat and dry the shrimp. The heads and shells are mechanically removed from the shrimp. The dried shrimp gets packaged and sent to grocery stores all over the country. Where do I work?

ANSWER: Shrimp Drying Plant

READER: I work at a business that handles millions of shrimp every year. My boss buys fresh shrimp of all sizes from shrimpers at the docks and brings the shrimp to our building, which looks like a big factory. The shrimp are dropped onto a conveyor belt, which carries them to boxes to be weighed. A machine automatically removes the peels, and the peeled shrimp get washed with lots of water to remove any remaining shells. The shrimp move onto a grader, which helps separate different sizes of shrimp. I help package the shrimp in plastic bags, which get placed in boxes and marked with the size of the shrimp (for example, 21/25 count shrimp = 21-25 shrimp per pound). The boxes move through a blast freezer, which quickly freezes the shrimp so they will stay safe as they travel to grocery stores and restaurants all over the country. **Where do I work?**

ANSWER: Shrimp Processing Plant

READER: My job is to go to processing plants and pick up hundreds of boxes of shrimp to put on my truck, which is equipped to keep the shrimp frozen. Sometimes, I make short trips to drive the shrimp to businesses in Louisiana. Other times, I am on the road for days at a time as I take shrimp to businesses as far away as California and New York. **What do I drive?**

ANSWER: Refrigerated Truck

READER: During shrimp season, we get truckloads of shrimp delivered to us every couple of days. Customers like to buy shrimp from us if they are planning to cook it at home. If my job is in Louisiana, then we can sometimes sell fresh shrimp. But if my job is in a state outside of Louisiana, then we sell frozen shrimp. **Where do I work?**

ANSWER: Grocery Store

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READER: When my boss can get Louisiana shrimp, he asks us to cook a variety of dishes for our customers. Sometimes I make boiled shrimp, but I also like to prepare Creole BBQ shrimp, shrimp pasta and shrimp po'boys. Even if I work in a state like Virginia, I can make Cajun shrimp dishes when the trucks deliver frozen Louisiana shrimp. **Where do I work?**

ANSWER: Restaurant

Consumers (4 cards)

READER: I want to have a big shrimp boil for our family Labor Day party. I want to boil about 30 pounds of large fresh shrimp, so I'll make a trip to the local docks where I can buy shrimp straight off the boat. If there aren't any shrimp boats available, then I'll make a trip to the local grocery store and buy fresh shrimp. **Who am I?**

ANSWER: Shrimp Boil Party Host

READER: I want to make a shrimp dinner for a small group of people, about six. I need just a few pounds of small or medium-sized shrimp to cook up into a nice shrimp pasta dish. I'll stop by a grocery store or local seafood dock on my way home from work. **Who am I?**

ANSWER: Shopper

READER: I just found out that fresh shrimp is going to be sold at the local docks this afternoon. I'm excited to be able to offer fresh Louisiana shrimp on the menu at my restaurant this weekend. I don't have time to wait for a truckload delivery, so I'll have to go straight to the docks to buy my shrimp. **Who am I?**

ANSWER: Chef

READER: I'm celebrating my birthday this weekend and would like to have shrimp for dinner. Since it's my birthday, I might go out to eat where someone else does all the cooking. **Who am I?**

ANSWER: Restaurant Diner