

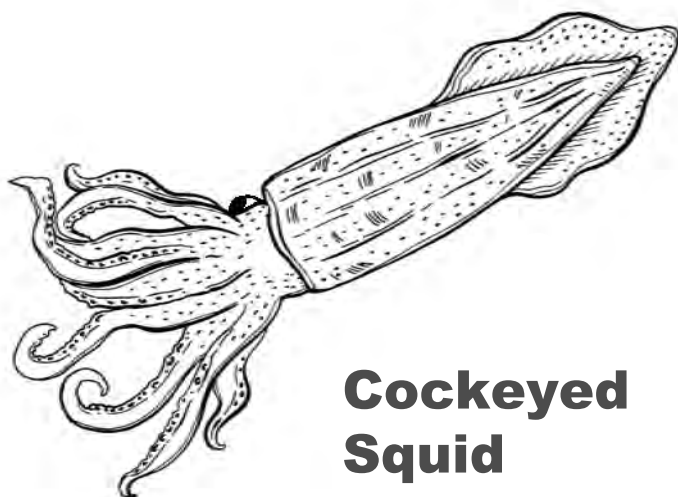


Sargassum (Limu kala)

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1. **DESCRIPTION:** Sargassum is an alga that lives in **shallow areas** where it can get plenty of **sunlight**. It also **has floats** that keep it near the surface.
2. **DIET:** It uses energy from the sun to grow through a process called **photosynthesis**. This means it is a **primary producer**.
3. **PREDATORS:** Sargassum is eaten by turtles, urchins, and fishes. It is also used by Hawaiians in ceremonies of forgiveness.

1A



Cockeyed Squid

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this line

1. **DESCRIPTION:** The cockeyed squid is a **deep water squid** with eyes that face different directions. The larger eye **looks up into the dimly lit waters**. The smaller eye **looks down to search for glowing animals in the darkness**. It moves by squirting water through a siphon. The cockeye squid can also produce its own light through a process called **bioluminescence**.
2. **DIET:** It **eats glowing (bioluminescent) animals**.
3. **PREDATORS:** Cockeyed squid are eaten by many animals, including sharks and tuna, whales, and people.

1A

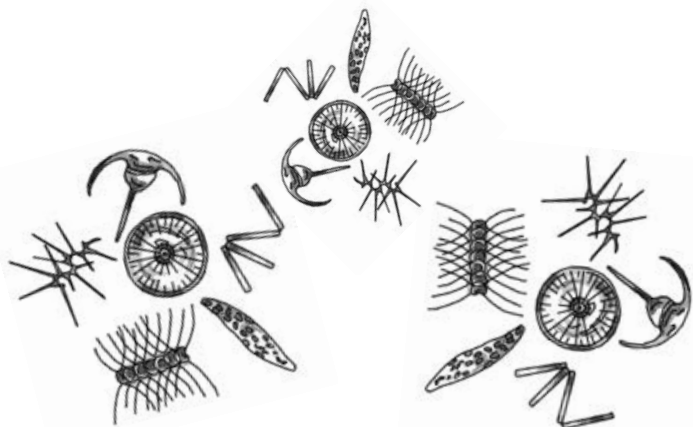
Glass sponge



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1. **DESCRIPTION:** The glass sponge is **adapted to live in cold and deep water**. It lives **attached to the bottom**. Special types of shrimp live inside glass sponges.
2. **DIET:** It eats small zooplankton and tiny pieces of food that it filters through holes in the sides of the sponge walls.
3. **PREDATORS:** Glass sponges are eaten by sea stars and sea slugs. Humans also harvest glass sponges for decoration.

1A

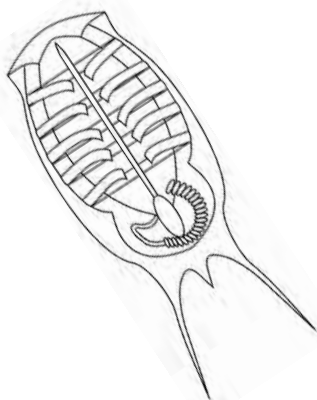


Phytoplankton (‘Ōulaula ka‘ama‘ai)

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1. **DESCRIPTION:** Phytoplankton are tiny, one-celled **algae that need sunlight**. They are found all over the ocean, and they **can move deeper in the water at night**.
2. **DIET:** They use energy from the sun to make food and grow in a process called **photosynthesis**. This means they are **primary producers**.
3. **PREDATORS:** Phytoplankton are eaten by small organisms, like zooplankton, shrimp, and krill. Humans also eat some types of phytoplankton, like spirulina.

1B



Salp

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this line

1. **DESCRIPTION:** The salp is an animal with a **jelly-like body** that pumps water through it's body and moves by jet propulsion. Salps can live alone, in groups called colonies, or in long connected chains. Salps are usually **found in deeper waters**, but they can **migrate to the surface waters** to feed.
2. **DIET:** It feeds by filtering water as it moves, **eating phytoplankton, zooplankton, and small pieces of food**.
3. **PREDATORS:** Salps are sometimes eaten by corals. Salps are also eaten by many fishes.

1B

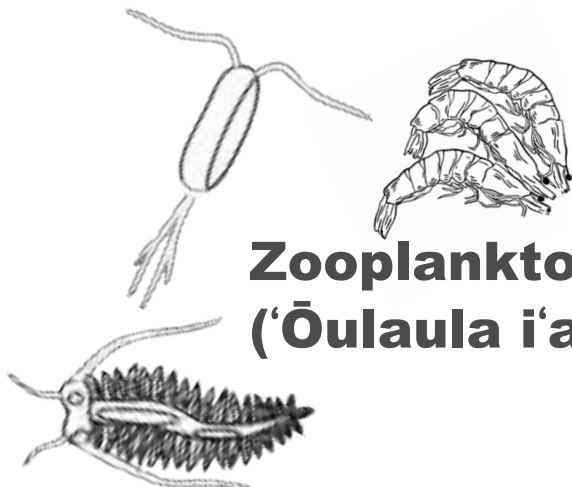


Sea pen

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1. **DESCRIPTION:** The sea pen is a type of coral that **lives mainly in the deep sea**. It **anchors itself to the bottom** of the soft, muddy deep sea floor.
2. **DIET:** It catches and filters zooplankton and small pieces of food from the water.
3. **PREDATORS:** Sea pens are eaten by some sea slugs and sea stars.

1B

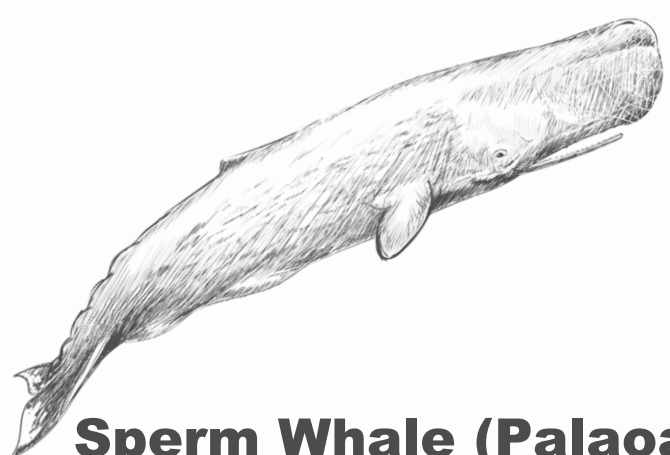


Zooplankton (‘Ōulaula i‘a)

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this line

1. **DESCRIPTION:** A Zooplankton is a small animal that **drifts and swims through the ocean**. Zooplankton are found in almost all parts of the ocean. Many zooplankton **move toward the surface at night and then move deeper during the day**. This behavior is called **vertical migration**.
2. **DIET:** They **eat phytoplankton** and other zooplankton.
3. **PREDATORS:** Zooplankton are eaten by many animals, including other zooplankton, jellyfish, fishes, some sharks and rays, and baleen whales (like humpbacks) that filter zooplankton from the water.

2A

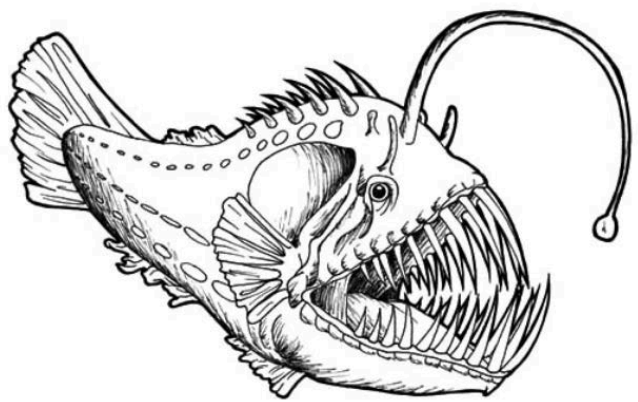


Sperm Whale (Palaoa)

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1. **DESCRIPTION:** The sperm whale is a large marine mammal that **spends most of its time in the deep waters** of the open ocean. It **breathes air at the surface and dives to great depths to feed**.
2. **DIET:** It **dives to deep waters to feed** on squid, octopuses, sharks, rays, and fishes .
3. **PREDATORS:** Sperm whales are eaten by orcas (killer whales). Pilot whales and false killer whales may also hunt sperm whales.

2A



Deep Sea Anglerfish

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1. **DESCRIPTION:** The deep sea anglerfish **lives in complete darkness**. It uses a **bioluminescent glowing "lure"** attached to it's head to draw in it's prey. It has **large teeth** help to capture anything that may cross it's path. It has **slow behavior adapted to the energy-poor environment of the deep sea**.
2. **DIET:** It **uses its lure to attract prey** and eats whatever it can catch, including shrimp, snails, and other fishes.
3. **PREDATORS:** Deep sea anglerfish are eaten by other deep sea fishes.

2A

Man o' War

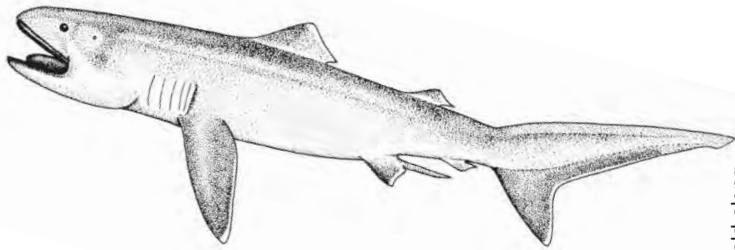
(Pololia)



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this line

1. **DESCRIPTION:** The man o' war **floats and drifts on the surface of the water**. It has stinging cells in its tentacles that dangle and catch food. The man o' war is related to jellyfish, but it is actually made of a group of cells that that work together in a colony.
2. **DIET:** It eats fishes, zooplankton, and shrimp.
3. **PREDATORS:** Man o' war are eaten by loggerhead sea turtles, blue sea slugs, violet snails, blanket octopus, and ocean sunfish.

2B

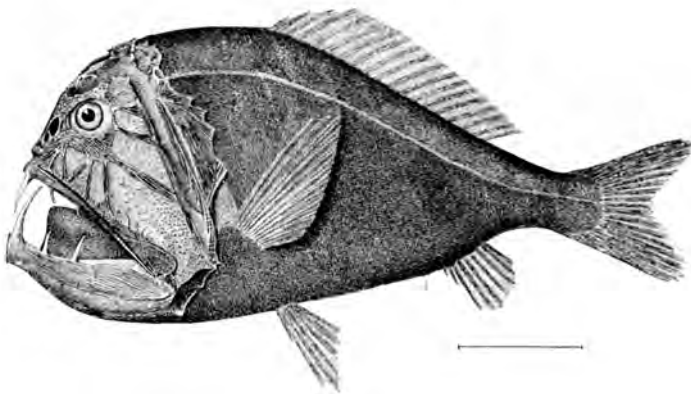


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Megamouth Shark

1. **DESCRIPTION:** The megamouth shark is a **slow swimming, mid-to-deep water shark** with a **soft, flabby body**. It has been recorded to **swim closer to the surface at night to feed and then return back to the deeper waters during the day**. This behavior is called **vertical migration**.
2. **DIET:** It swims with its mouth open to filter and eat plankton and jellyfish from the surrounding waters.
3. **PREDATORS:** Megamouth sharks may be eaten by other large, deeper water animals but very little is known about their predators.

2B

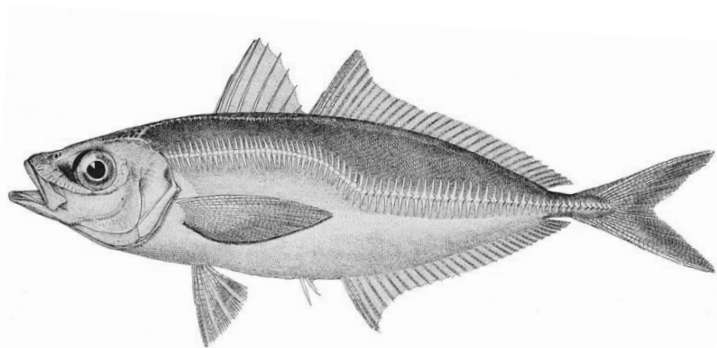


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Fangtooth fish

1. **DESCRIPTION:** The fangtooth fish has **small eyes because it lives in complete darkness** most of the time. It has **very large teeth** to help capture any food that swims by. It may swim in a **vertical migration** pattern, **moving up to the twilight zone to feed during the day and back down at night**.
2. **DIET:** It eats small fishes and squid.
3. **PREDATORS:** Fangtooth fishes are eaten by other fishes. Some species of shark may also eat them.

2B

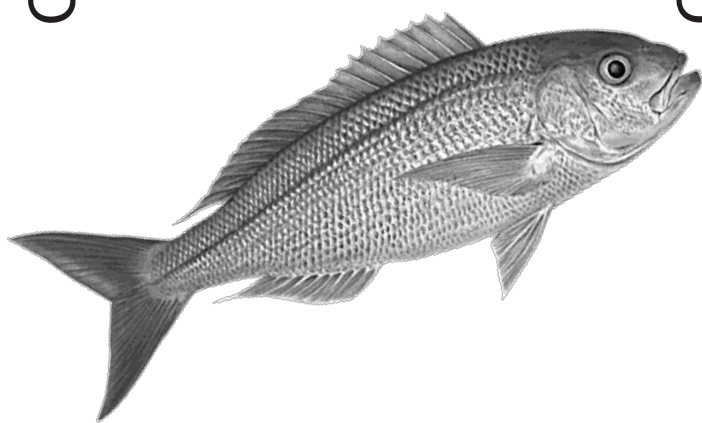


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Akule (Big Eye Scad)

1. **DESCRIPTION:** The akule is a fish that lives in large schools and is mostly active at night. It has a color pattern called **counter shading**. This **coloring helps it blend in to the surface waters** with blue-green on its back and sides and white on its belly.
2. **DIET:** It feeds on small fishes and crustaceans that live in **shallow waters**.
3. **PREDATORS:** Akule are a very popular food for people. They are also eaten by larger fishes like tuna.

3A

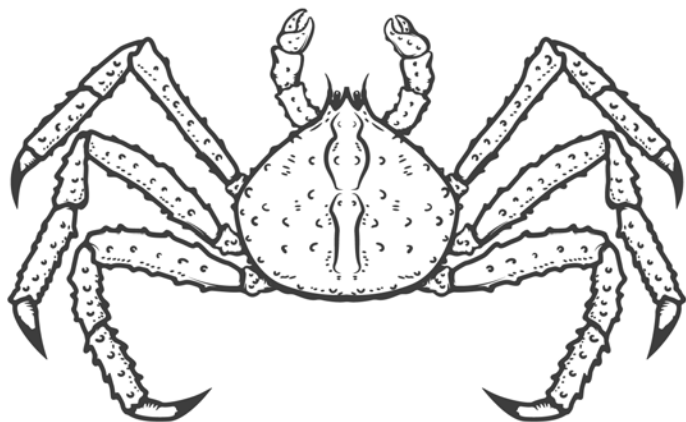


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Opakapaka (Pink Snapper)

1. **DESCRIPTION:** The opakapaka is a type of **mid-to-deep water** snapper that lives in rocky areas of the **twilight zone**.
2. **DIET:** It feeds mostly on small fishes and crustaceans like crabs and shrimp.
3. **PREDATORS:** Opakapaka are eaten by other large fishes and sharks. Opakapaka are also a popular food for people.

3A

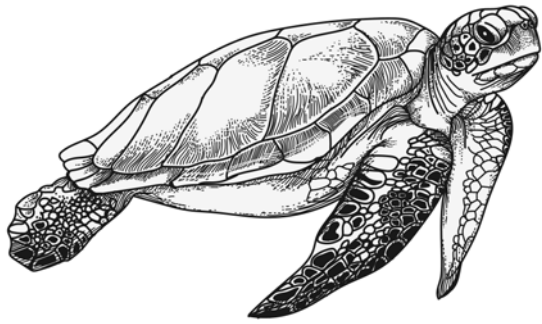


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King Crab

1. **DESCRIPTION:** The king crab can grow to be very large. It is **adapted to cold water and can live in the very deep ocean**. The king crab **crawls on the bottom** to find food.
2. **DIET:** It eats almost anything it can find, including worms, clams, mussels, barnacles, other crabs, fish, sea stars, sand dollars, and brittle stars.
3. **PREDATORS:** King crabs are eaten by large fishes, octopuses, and even other king crabs. King crab is also a popular food for people.

3A

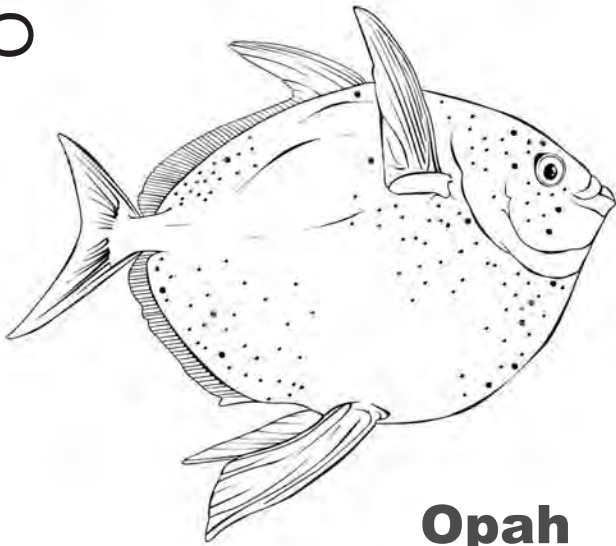


**Honu
(Green Sea Turtle)**

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1. **DESCRIPTION:** The honu **breathes air**. It has a hard shell to protect it from predators. It has a color pattern called **counter shading**. The shell is colored brownish on top and yellowish underneath, which helps it **blend into the shallow open ocean waters**. Female green sea turtles **lay their eggs on sandy beaches**.
2. **DIET:** It eats fishes and crustaceans when it is young and mostly **algae** and jellyfish when it is an adult. It can **dive deep to search for food**.
3. **PREDATORS:** The honu is eaten by sharks. Honu are also a popular food for people.

3B

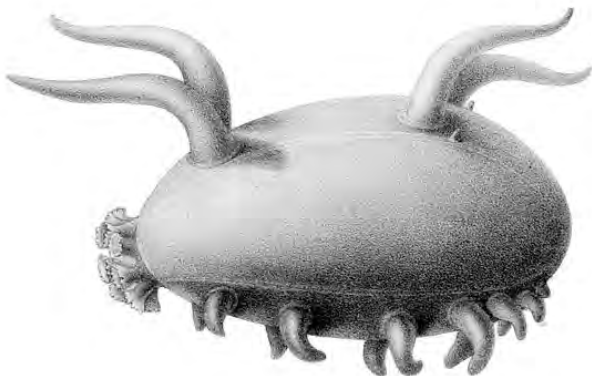


**Opah
(Moonfish)**

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1. **DESCRIPTION:** The opah fish is shaped like a large disc. It can generate it's own heat by continuously moving it's fins, which **allows it to live in the cold waters of the deep sea**. It may **swim up to the surface at night to feed** and then return back to the deeper waters during the day. This behavior is called **vertical migration**.
2. **DIET:** It eats mainly squid, krill, and small fishes that it catches in **mid-water depths**.
3. **PREDATORS:** Opah are eaten by large sharks. Opah are also a popular food for people.

3B

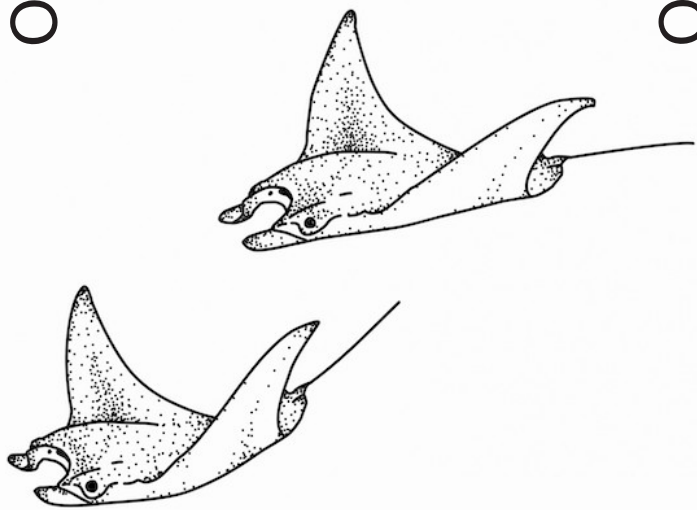


**Sea Pig: Deep Sea
Cucumber**

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1. **DESCRIPTION:** The sea pig is a deep sea cucumber that **crawls along the seafloor** and filters through the mud for food. It has a **blobby body** that helps it survive in the **high pressure and low energy environment of the deep sea**.
2. **DIET:** It eats **small pieces food that it filters from deep sea mud**. It also uses it senses to find and feed on large dead animals, like whales, that **fall to the sea floor**.
3. **PREDATORS:** The sea pig is eaten by parasites that feed on it while it is alive!

3B



Manta Ray (Hāhālua)

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1. **DESCRIPTION:** The manta ray is a large ray that can grow to have a wingspan over 20 feet! It has a color pattern called **counter shading**. The manta ray is dark on top and light on the bottom. This color pattern helps it stay **camouflaged in shallower waters**. It is seen often along coral reefs.

2. **DIET:** It glides through the water filtering and **eating zooplankton near the surface and in mid-to-deep waters**.

3. **PREDATORS:** Manta rays are eaten by large sharks and orcas (killer whales). 4A



Giant Squid

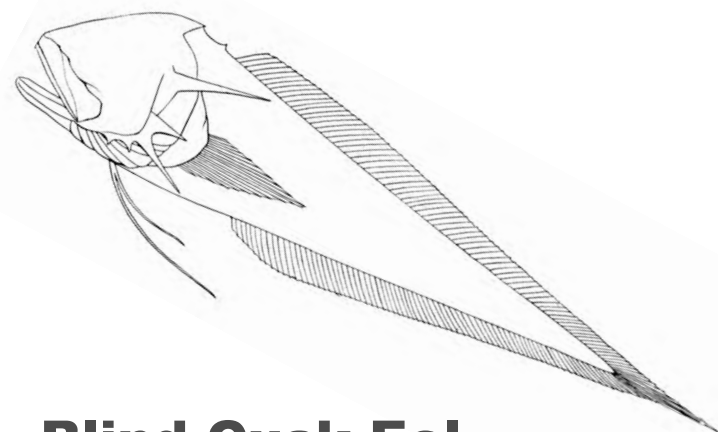
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1. **DESCRIPTION:** The giant squid is a very large squid that can grow over 45 feet long! It has **very large eyes to help it see in the dark waters of the mid-to-deep ocean**.

2. **DIET:** It eats **deep-sea fishes and squid**.

3. **PREDATORS:** The giant squid is eaten by **sperm whales and pilot whales in the mid-water depths**.

4A



Blind Cusk Eel

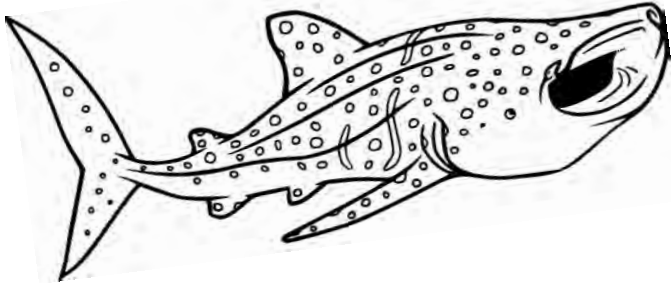
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1. **DESCRIPTION:** The blind cusk eel is a fish that has **adapted to live in the cold darkness of the deep sea**. It does not have any eyes! It has also has pale, **jelly-like skin**.

2. **DIET:** It eats small fishes and other small animals. It may also eat small pieces of food that fall from the zones above.

3. **PREDATORS:** The blind cusk eel is probably eaten by other fishes.

4A



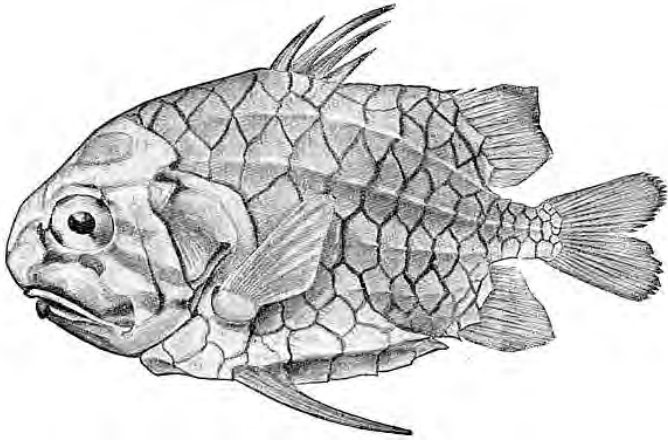
Whale Shark (Lelewa'a)

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1. **DESCRIPTION:** The whale shark is a slow moving, large shark that swims with its mouth wide open to filter food from the water. It has a color pattern called **counter shading**. It is dark on top (with spots) and light on the bottom. This color pattern helps it stay **camouflaged in shallower waters**.

2. **DIET:** It eats zooplankton and small animals (like fishes and squid) that it filters from the water.

3. **PREDATORS:** Whale sharks are eaten by orcas (killer whales) and people. **4B**



Pinecone Fish

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1. **DESCRIPTION:** The pinecone fish is a small fish that **lives in deep caves and ledges**. It hides during the day and hunts at night. It **can make its own light through the process of bioluminescence**.

2. **DIET:** It eats zooplankton that it **attracts with its own light**.

3. **PREDATORS:** The pinecone fish is eaten by some sharks and octopuses. People also collect pinecone fish for aquariums. **4B**



Dumbo Octopus

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1. **DESCRIPTION:** The dumbo octopus is an octopus **adapted to live in very cold and deep water**. It has a **soft and pale body**. Its arms are adapted to help it **crawl along the bottom**, and it **hovers just above the sea floor to feed**.

2. **DIET:** It eats worms and crustaceans

3. **PREDATORS:** The dumbo octopus is eaten by sharks and other species of octopus. **4B**