**Food Webs**

Food chains, like the one that the mackerel is a part of, show how energy is transferred when one organism eats another. **Food webs** are many connected food chains within one habitat.

- Color the organisms in the boxes.
- Cut out the boxes.
- Using the clues arrange the boxes in a **food web**.
- Draw a sun on another piece of paper to start the food web.
- Use glue to stick the boxes on another sheet of paper.
- Use arrows to show which direction the energy is moving in the **food web**.

This is the mackerel food chain you learned about at Birch Aquarium:

Sun $\rightarrow$ Phytoplankton $\rightarrow$ Zooplankton $\rightarrow$ Anchovy $\rightarrow$ Mackerel $\rightarrow$ Tuna $\rightarrow$ White Shark

- Once you have completed your food chain, think about and answer the following questions:
  1. What organism in our food web is the producer?

  ____________________________________________________________

  2. What animal or animals are the top predators in the food web you created?

  ____________________________________________________________

  3. What would happen to the rest of the food web if the mackerel disappeared?

  ____________________________________________________________

  ____________________________________________________________

  ____________________________________________________________

  ____________________________________________________________

  4. Where would humans be in this food web?

  ____________________________________________________________

  **Bonus:** add the tuna and shark from the original food chain to your food web
Squid
I use my long tentacles to catch food. I change my skin color to avoid many predators.

Brown Pelican
My bill has a large pouch for catching fish. My pouch can hold 2 gallons of water!

Orca
My pod mates and I use echolocation to find our prey, which can sometimes as big as a white shark.

Sea Lion
My keen eyesight and sensitive whiskers help me hunt fish and squid.

Mackerel
My streamlined body and countershading coloration helps me catch food and escape predators.

Leopard Shark
Though I camouflage with the sandy bottom to avoid predators, I swim into the deeper open ocean to feed on squid.

Anchovy
I might be a tiny fish by myself, but swimming in a large school helps me to avoid being eaten by other fish.

Phytoplankton
Tiny and plant-like, I am the foundation of ocean food webs because I make my own food using sunlight.