# Sharing the Sea



## **Objective**

Students will investigate the interrelationships of predator and prey and the diversity of food items in the sea.

## **Materials**

- copies of Sharing the Sea worksheet per student
- ☐ internet access for research
- pen or pencil

## **Background**

Many animals eat similar food items, depending on the location and availability of prey. People also eat some of the same animals as pinnipeds. To ease competition, animals may feed at different times of the day (nocturnal versus diurnal feeders) or may catch different sizes of prey (young larval stages versus full-grown adults).

## **Action**

- 1. Distribute Sharing the Sea worksheets to each student.
- 2. Working in groups, ask students to use the internet to research what each pinniped eats. On the worksheet, they checkmark the appropriate food items. They also mark the food items that humans might eat.
- 3. In their groups, students look for species that share the most food items.
- 4. As a class, discuss how competing species could share ocean resources. How can we share resources with pinnipeds?

#### **Deeper Depths**

Have students research some of the commercial fisheries that have declined or collapsed. For example, the cod fishery in the northwestern Atlantic, the anchovy fishery off the Pacific coast of South America, and the salmon fishery in the northeastern Pacific.

How does overfishing by humans affect the animal populations that also prey on these items? Can students find other animals (besides pinnipeds) that are affected by overfishing?





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Use the internet to discover what each pinniped eats and check the appropriate box. Then, check the boxes of items that humans might eat.

food items	harbor seal	California sea lion	Guadalupe fur seal	Steller sea lion	northern elephant seal	humans
Crustaceans shrimps						
lobsters						
crabs						
Molluscs squids						
octopuses						
clams						
snails						
mussels						
Fishes rays						
skates						
sharks						
deepwater fishes						
eels						
Mammals seals						
whale carcasses						