

## Seals and Sea Lions: Venn Diagram

### OBJECTIVES

Students will create a Venn diagram showing sets of the characteristics of seals and sea lions.

### MATERIALS

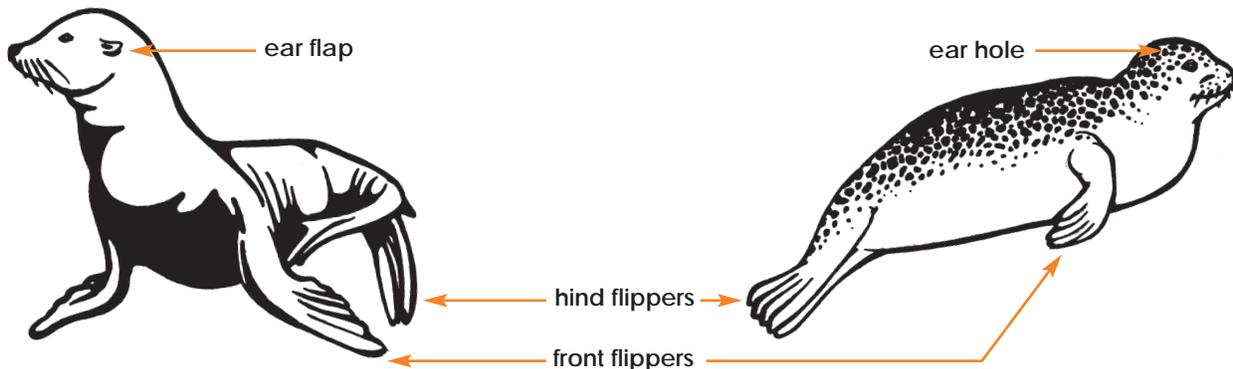
- list of seal and sea lion characteristics as described below

### BACKGROUND

Seals, sea lions, and walruses all belong to a group of animals known as pinnipeds. Scientists categorize pinnipeds as true seals, sea lions, or walruses based on characteristics such as body shape. The information and illustrations below show some of the differences between true seals and sea lions. *(Note: Fur seals are grouped with sea lions.)*

Like other mammals, pinnipeds are warm-blooded, give live birth, nurse their young, breathe air, and have hair. Pinnipeds also have blubber and sensitive whiskers called vibrissae. Although most of their lives are spent in the water, pinnipeds are dependent on land. They come ashore periodically to rest and bask in the sun, and at least once a year – during their breeding season – most species congregate on beaches or sea ice to give birth and breed.

How can you tell the difference between a seal and a sea lion?



#### sea lions and fur seals

#### true seals

|                  |   |   |
|------------------|---|---|
| HEAD             | ◆ small, slim, external ear flaps   | ◆ tiny ear holes, no ear flaps  |
| FRONT FLIPPERS   | ◆ short and blunt, usually hairless; short nails  | ◆ covered with hair; clawlike nails   |
| HIND FLIPPERS    | ◆ hairless, large and paddlelike<br>◆ webbed digits; nails on middle three digits<br>◆ turn forward to walk on land | ◆ covered with hair, short and paddlelike<br>◆ webbed digits; nails on all digits<br>◆ can't turn forward |
| MOVEMENT ON LAND | ◆ "walks" on all fours  | ◆ "bounces" or undulates  |



**ACTION**

1. Share the description of true seals and sea lions with your students. Ask them how they would be able to tell the difference between true seals and sea lions.
2. Ask students to create a Venn diagram showing the characteristics of seals and sea lions. Which characteristics are common to both kinds of animals? Which are only characteristics of true seals? Which are only characteristics of sea lions?



California sea lions (*Zalophus californianus*) have small external ear flaps and winglike front flippers.

