



## LEARNING LABS ICY ADAPTATIONS

Take a closer look at Shedd's Abbott Oceanarium animals. Students investigate and explore some of the adaptations that enable belugas, sea otters and penguins to survive in their icy habitats.

**GRADE LEVEL:** K-2 | **CAPACITY:** 35 students | **DURATION:** 50 minutes

### KEY CONCEPTS

Adaptations, animal behavior, insulation, anatomy

### SKILLS

Identification, compare and contrast, organize data, teamwork, experimentation, investigation

### IL STATE LEARNING STANDARDS

- 11.A.1a, 11.A.1b, 11.A.1c, 11.A.1f
- 12.A.1a, 12.B.1a
- 13.A.1c

### WHAT TO EXPECT FROM THE LEARNING EXPERIENCE

- Students experiment to explore cold water adaptations
- Students work and collaborate in groups
- Teachers and chaperones may participate
- Multimedia resources encourage further exploration
- Students sit on mats in groups



For more information contact  
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## FURTHER EXPLORATION

### Shedd Educational Adventures

#### *Build a Fish*

<http://sea.shedd-aquarium.org/sea/>

### Encyclopedia of Life

<http://www.eol.org/>

### National Geographic Kids

#### *Animals, Creature Features*

<http://kids.nationalgeographic.com/kids/animals/creaturefeature/>

### EcoKids

#### *Animal Adaptations*

[http://www.ecokids.ca/pub/eco\\_info/topics/climate/adaptations/index.cfm](http://www.ecokids.ca/pub/eco_info/topics/climate/adaptations/index.cfm)



## CONNECTIONS TO THE EXHIBITS

**Every animal you meet in the aquarium has adapted to life on Earth. Each has developed physical features and behavioral patterns over time to survive in a specific environment. Shedd's exhibits, which showcase aquatic environments around the world, can be used to explore these concepts.**

### Abbott Oceanarium

Observe the beluga whales at Secluded Bay's underwater viewing windows. What color are the whales' bodies? What else might be white in their habitat? Many animals use color to blend in with their habitats. What do scientists call this?

### Oceans Gallery

Have students find and observe the giant Japanese spider crab and the Australian southern rock lobster. Ask students if people have skeletons on the outside or inside of their bodies. Explain to students that while our skeletons are on the inside, crabs and lobsters "wear" their skeletons on the outside. Discuss why it would be helpful for an animal to have a hard outside covering.

### Amazon Rising

Even tropical animals have adaptations to their environment. Lead students to the River Beach or River Channel sections of Amazon Rising. Have students compare the animals, paying special attention to where each animal's mouth is located. What does mouth placement tell you about where the animal gets its food? Which animals are bottom feeders? Which animals are top feeders?

## CONNECTIONS TO YOUR CLASSROOM

- Read the story *Penguins, Penguins, Everywhere!* by Bob Barner. This story's bright illustrations, simple text and fun facts can be used to spark a discussion about what makes a penguin a penguin. How do these features help penguins survive?
- To extend your experience beyond the aquarium, design a make-believe animal with many observable physical adaptations. Have your students draw or build the creature's habitat. After constructing the habitat, have them write a story about how the animal is able to live in its home.



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