

6-12

TEACHER'S GUIDE
Jellies Special Exhibit



Explore the world of sea jellies in an immersive and interactive special exhibit.

KEY CONCEPTS

- Life cycles
- Anatomy
- Classification
- Jelly blooms

**WHAT TO EXPECT**

- Immersive experience in sea jellies' ocean world
- Animal exhibits showcasing a variety of sea jelly species
- Interactive exhibits

**CONNECTIONS TO THE EXHIBIT****Imagine Another World**

- Use this space to introduce your students to the world of jellies. After entering the exhibit, have your students observe the moon jellies. What characteristics identify them as jellies? What animals are jellies most closely related to? Does anything about their body structure or movement tell you about their lifestyle?
- Discuss the terminology used with jellies. Why is the term fish not used to describe jellies? Encourage students to challenge their previous beliefs and to come up with questions about jellies that they can seek answers to in the next section of the exhibit.

Living in their World

- Challenge students to figure out how a jelly catches and eats its prey. Have students identify external and internal anatomy that would be critical to the process of consumption and digestion. Where do nematocysts (stinging cells) fit into this process? What is the primary purpose of nematocysts?
- Observe the jellies in the exhibit, focusing on body structure. How can jellies survive in the ocean without bones, brains, or blood? What other adaptations do they have that help them to survive? Students can explain that the jelly anatomy has allowed these animals to survive successfully for millions of years.
- Using the animal exhibits, explore the movement of jellies. How do they move through the ocean? What adaptations do they have that allow them to move in this way?
- Explore the exhibit windows that illustrate the life cycle of a jelly. How does the anatomy of a jelly change as it matures? How is this life cycle different from that of other animals? Have students discuss why this life cycle has been successful in the ocean. What is the reproductive strategy, and how does it promote the survival of many species of animals within the ecosystem? Do other animals reproduce in the same way?

OVER ►►



- Visit the upside-down jellies' habitats. Upside-down jellies have a symbiotic relationship with algae. Ask your students to discuss this example in which two species contribute to each other's survival.
- Explore scientists' interest in jellies' unique characteristics. How do scientists use what they have learned from jellies in the lab and in the field?



If Jellies Took Over

- After your students observe the exhibit, have them identify anthropogenic causes for jelly blooms. How have humans contributed to this natural phenomenon? What other animals are being affected by jelly blooms? How do increased numbers of jellies negatively affect humans? What do blooms tell scientists about the state of the ocean and its aquatic environments?
- Have your students discuss the components and balance of a healthy ocean. What happens when one factor is out of balance? Why should we care about the health of the ocean? What can students do to help keep the ocean healthy?

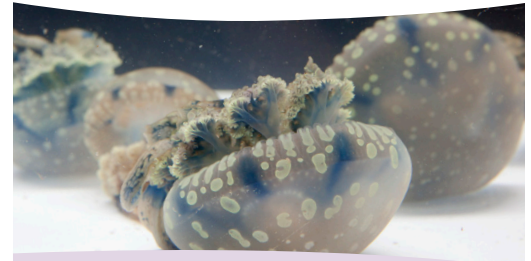
CONNECTIONS TO THE CLASSROOM

Pre-Visit Activities

- Have students make a KWL (Know, Want to Know, Learned) chart about jellies. Have them fill in what they already know about jellies and what they would like to learn about jellies from the trip to Shedd Aquarium.
- Discuss what makes a jelly a jelly and how jellies are similar to or different from other animals. Make connections to the topics your students are currently learning in science class, such as animal anatomy, taxonomy, ecology, and/or environmental science. For anatomy, talk about the structure and function of a jelly body. For taxonomy, discuss where jellies fit into the classification system and why? For ecology, talk about adaptations and relationships between organisms. For environmental science, talk about human impact on ecosystems.

Post-Visit Activities

- Review the KWL sheet the students completed before their Shedd visit. Discuss the field trip and have them fill in the "Learned" column of their KWL chart.
- Think about the observations students made in the *Jellies* exhibit. Have them write an autobiography from the perspective of a jelly.
- Discuss the type of work that scientists do with jellies. Have the students pretend they are a jellies scientist. Based on their observations of the exhibit, have them write a scientific paper about a jelly species. What additional investigations could they design to learn more about their species?



FURTHER EXPLORATION

Shedd Aquarium *Jellies* Special Exhibit
www.sheddaquarium.org/specialexhibit

Jellies Sightings
www.jellywatch.org/

Jellies Information
www.nsf.gov/news/special_reports/jellyfish/index.jsp

www.dnr.sc.gov/marine/pub/seascience/jellyfi.html

www.georgiaaquarium.org/explore-the-aquarium/interact/exhibits/tropical-diver/

For more information contact
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