

# Ocean Who Am I?

## Adaptation guessing game

### KNOWLEDGE

- Learn about different features that scientists use to classify animals
- Investigate animal adaptations
- Encourage critical observation of animals' features and how they relate to their environment

### ACTIVE

- Students participate in a classroom discussion
- Students try to guess what animal they are based on the picture taped to their back
- Students answer questions about the physiology of animals from pictures

TIME	GROUP SIZE	LOCATION	GRADE LEVEL	EQUIPMENT
As long or short as you'd like	5+	Classroom	Any	Who Am I? Pictures of Marine Animals (invertebrates & vertebrates) Tape/clips/some sort of fixative
DEBRIEF/REFLECTIVE COMPONENT			HELPFUL TIPS	
<ul style="list-style-type: none"> <li>• Why do you think some of these animals have shared features (similar adaptations)?</li> <li>• Why is classification important? Why do we bother with classifying animals?</li> <li>• How do some of these adaptations help animals survive in their environments?</li> <li>• Do you think any of these animals could survive out of the water?</li> <li>• What are some differences between these animals and terrestrial animals?</li> </ul>			<ul style="list-style-type: none"> <li>• A simplified dichotomous key might assist kids' classification</li> <li>• You can highlight the environmental factors or adaptations that each animal would face in particular ecosystem</li> </ul>	

## OCEAN LITERACY PRINCIPLES

5 – The ocean supports a great diversity of life and ecosystems.

- a. Ocean life ranges in size from the smallest living things, microbes, to the largest animal on Earth, blue whales.
- c. Most of the major groups that exist on Earth are found exclusively in the ocean and the diversity of major groups of organisms is much greater in the ocean than on land
- e. The ocean provides a vast living space with diverse and unique ecosystems from the surface through the water column and down to, and below, the seafloor. Most of the living space on Earth is in the ocean.
- f. Ocean ecosystems are defined by environmental factors and the community of organisms living there. Ocean life is not evenly distributed through time or space due to differences in abiotic factors such as oxygen, salinity, temperature, pH, light, nutrients, pressure, substrate, and circulation. A few regions of the ocean support the most abundant life on Earth, while most of the ocean does not support much life.
- h. Tides, waves, predation, substrate, and/or other factors cause vertical zonation patterns along the coast; density, pressure, and light levels cause vertical zonation patterns in the open ocean. Zonation patterns influence organisms' distributions and diversity.

### Setup

1. Explain how we categorize animals based on features (ex. bones/no bones).
2. Review different groups of animals and their features (such as mammals, reptiles, amphibians, fish, invertebrates, birds). Have the children offer examples of animals that would fit into each group.
3. Keeping the pictures hidden, tape one picture of an animal on each child's back. Make sure that child doesn't know which picture it is.
4. Have the students move around the room asking each other one question at a time to help them determine which animal they are.
5. Campers can only ask yes or no and the answer must be given as either "yes" or "no".
6. Two children can take turns asking their own questions, or move on and ask questions of another child. When a child figures out the picture, tape another picture on his or her back and play until every child has figured out at least one.