

Super Animal

**Use
Imagination to
Create a
Perfectly
Adapted
Animal**

KNOWLEDGE

- Learn about features that help different animals survive
- How human impacts affect the health of different animals
- How different animals are adapted to different ecosystems

ACTIVE

- Students participate in a classroom discussion
- Students use their imagination to create an animal that is perfectly adapted for an ecosystem

TIME	GROUP SIZE	LOCATION	GRADE LEVEL	EQUIPMENT
As long or short as you'd like	3-4	Classroom	Any	Whiteboard / Large paper
DEBRIEF/REFLECTIVE COMPONENT			HELPFUL TIPS	
<ul style="list-style-type: none"> • What features do different animals have that allow them to survive in their habitat? • What features does your animal have that make it ideally suited for its habitat? • What is the difference in abiotic factors that animals have to deal with between ecosystems? • Would your "super animal" be able to survive in another ecosystem? 			<ul style="list-style-type: none"> • You can highlight a list of features that allow animals to survive in different ecosystems that would help guide the class as they were creating their own animal • You can highlight the environmental factors that each animal would face in particular ecosystem to further guide them when creating their own animal 	

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.

6 – The ocean and humans are inextricably interconnected

- e. Changes in ocean temperature and pH due to human activities can affect the survival of some organisms and impact biological diversity (coral bleaching due to increased temperature and inhibition of shell formations due to ocean acidification).
- g. Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.

7 – The ocean is largely unexplored

- a. The ocean is the largest unexplored place on Earth – less than 5% of it has been explored. The next generation of explorers and researchers will find great opportunities for discovery, innovation, and investigation.

Setup

1. Start the class by talking about features animals have that help them survive, and how different animals are adapted to different habitats
2. You can give examples of different animals and the features they have that allow them to live in their habitats
3. You can then split the class up into groups of 3 or 4 (or have them work individually)
4. Assign each group a habitat and have them design a “super animal” that would be ideally suited for that habitat (Remind them to be creative!)
5. Afterwards have each group present their “super animal” and explain why its features make it ideally suited for its habitat
6. You can ask them if their super animal would be able to survive in a different environment. Why or why not?